Center for Strategic Studies and Reforms

Moldova in transition

ECONOMIC SURVEY

3

Chişinău, April 1999

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MOLDOVA IN TRANSITION

economic survey

3

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PREFACE

The year 1999 will be for the Republic of Moldova at a crossroad. The I. Sturza Cabinet in its program took the way to a "new economic policy", which more harmoniously combines the social components, structural reforms and actions in the financial sector. The program was backed by the Parliament, international financial organizations and it is more acceptable for the population.

The end of the first round of reforms (from the crisis of 1991-92 to the crisis of 1998) had a dramatic impact on the Republic of Moldova, through the events of the last year, both internally – in terms of economic decline resuming(after a positive break of 1997), salaries and pensions arrears accumulation, extremely low inflow of foreign investments, decline of exports (for the first time after 1990), as well as externally, due to financial crisis in Russia and extremely high level of foreign debt. Ultimately, a government crisis unleashed, which ended as late as in March 1999, granting, in the end, a chance to the Cabinet of the "young reformers".

The contents of the present survey "Moldova in transition" takes into consideration the particularities of the moment and includes: evaluation of the lessons of 1998 and problems, that require first priority resolution; scenarios of the potential short-run social-economic development of the country; modeling of macro-economic indicators and processes, most important for enhancing the results of the reform.

This survey has been prepared in the framework of the UNDP/WB project "Strategy for Development". The opinions and conclusions presented in this study entirely belong to their authors and do not necessarily express the viewpoint of the organizations which finance the research or of Moldovan state structures. In the drafting of the edition data from the Ministry of Economy and Reforms, Ministry of Finance, National Bank of Moldova, Department of Statistics and Sociological Analysis, TACIS project "Moldavian Economic Trends" was utilized.

The authors of the edition are: CISR experts – Andrei Cantemir (1), Lilia Caraşciuc (1, 3.3, 4.3), Sergiu Galearschi (1, 4.4), Anatol Gudîm (1), Andrei Munteanu (1), Veaceslav Negruța (1, 2, 4.1), Oleg Petruşin (1, 3.1, 4.2), Aurelia Pripa (1), Octavian Şcerbațchi (1, 2, 4.1), as well as CASE (Center for Social and Economic Research, Warsaw, Poland) consultants – Prof. Constantin Zaman and Artur Radzwill (3.2).
Team leader of the UNDP/WB Project "Strategy for Development" – Prof. Jerzy Osiatynski.

We invite you to collaboration.

1. LESSONS OF 1998. THE THIRD ATTEMPT AT STABILIZATION

In social-economic respect, the past year was for the Republic of Moldova an *year of disappointment*. The assumption that in the end premises for economic growth were created did not become true. Positive signal of 1997 (GDP +1.6%), growth of industrial and agricultural output, reduction of state arrears for salaries and pensions now have remained in the records of the transition economy just as a statistical episode. The President and the political elite of Moldova succeeded in achieving certain progress in terms of foreign policy, the Parliament was elected on multi-party basis (March 1998) and a new Government was formed, orienting its program towards reforms.

Regretfully, the break in reforms, undertaken by the Parliament in 1996-1997 and the following freezing of the relationships with IMF and WB led to enhanced structural disproportions, growth of internal and external debts, deepening of the budget crisis, reduction of cash inflows from exports, and a further aggravation of social situation. After August 1998 those problems were deepened by the Russian financial crisis, which became a catalyst of negative processes, such as reduction of foreign exchange reserves of the NBM, monetary and banking system disbalances, paralysis of production and exports, still heavily exposed to the Eastern market.

The *economic security* of the Republic of Moldova was at stake, and from the first time since the early ‘90s, this problem was examined (Dec. 1998) by the Security Council under the auspices of the President of Moldova.

Lessons of 1998. The events and results of 1998 show the *failure of the second attempt of stabilization* of the national economy. The first one (1993-1995) was rather successful (inflation suppression, national currency stabilization, mass privatization, commencing of industrial enterprises restructuring). The second attempt (1997) carried out by the Government, basically using administrative methods (pressures on tax collection, sale of jet-fighters, etc.), and having weak legal support from the Parliament, failed because of the accrued domestic structural disproportions, lack of structural changes at the micro-economic level, weakness of the state management system, and after autumn 1998 - because of the destructive impact of the Russian financial crisis. Neither the forecast of the Government, nor that of the international financial institutions became true.

The official statistics registered in 1998: minus 8.6% of real GDP and minus 11% of both industrial and agriculture output. Thus, the first round of reform – from the crisis of 1991/92 to the crisis of 1998 – was completed, however not in the best manner[1]. After 7 years of reforms the Ranking List of the World Bank posted Moldova on the 94-th place amongst 133 countries, in terms of GDP per capita, including it to the group of 63 “Low income countries”[2]. At the same time, all other countries of the South-Eastern Europe (Albania, Bulgaria, Macedonia, Romania, Turkey, Ukraine and Yugoslavia) were included in the group with higher incomes. In accordance with the UNDP evaluation (1998) about 80% of the population of Moldova have incomes worth less than US$ 2 per day, whereas the income discrepancy between wealthiest 10% and poorest 10% reached 15.4-fold (in 1993 7.0-fold).

[1] For more details see “Moldova in Transition”, CISR Economic Survey No.2, Nov. 1998, pp. 4-9
[2] World Development Report 1998/1999, pp.189-191.

MAIN MACROECONOMIC INDICATORS

	1994	1995	1996	1997	1998	1999f
Real GDP growth rate	-30.9%	-1.4%	-7.8%	1.6%	-8.6%	-2.5%
Nominal GDP (excl. Transnistria), lei million	4737	6480	7658	8917	8804	10911
Nominal GDP, USD million	1164	1443	1665	1933	1630	1116
GDP per capita, USD	322	400	463	538	454	311
Export (fob), USD million	618	739	822	851	640	704
Export, yr/yr	156.5%	119.6%	111.2%	103.5%	75.2%	110.0%
Import (fob), USD million	672	794	1056	1235	1030	938
Import, yr/yr	126.8%	118.2%	133.0%	117.0%	83.4%	91.1%
Trade balance, USD million	-54.0	-55	-234	-384	-390.0	-234
Current account, USD million	-97	-115	-209	-309	-300	-129
as % of GDP	-8.3%	-8.0%	-12.6%	-16.0%	-18.4%	-11.6%
Foreign direct investments, USD million	18	73	53	79	70	150
as % of GDP	1.5%	5.1%	3.2%	4.1%	4.3%	13.4%
Stock of foreign debt, USD million	627	765	916	1005	922	957
as % of GDP	53.8%	53.0%	55.0%	52.0%	56.6%	85.7%
NBM gross forex reserves, USD million	180	257	314	366	144	200
NBM rez. In months of imports of GFS	2.85	3.03	3.00	3.07	1.42	2.15
Internal debt, million lei	270	477	737	940	1500	1700
Budget balance as % of GDP	-10.6%	-6.7%	-7.6%	-7.8%	-3.6%	-1.6%
Annual inflation rate (end period)	104.6%	23.8%	15.1%	11.2%	18.3%	19.1%
End-year exchange rate, lei/1USD	4.27	4.50	4.65	4.66	8.32	11.58
Average exchange rate, lei/1USD	4.07	4.5	4.6	4.6	5.4	9.8
Nominal end-year appreciation(+)/depreciation(-), MDL/USD	–17.3%	–5.4%	–3.4%	–0.2%	–78.6%	–39.2%
Nominal end-year appreciation(+)/depreciation(-), USD/MDL	–14.8%	–5.1%	–3.2%	–0.2%	–44.0%	–28.1%
Real end-year appreciation(+)/depreciation(-)	+74.4%	+17.5%	+11.4%	+10.9%	–33.8%	–14.4%

External trade data for 1998 is estimated

According to local and foreign experts, the main reason for poor economic performance was that during the past 2-3 years there was a vacuum of power in Moldova - a *political will towards reforms' continuation has weakened*, there was no unity of actions of the President, Parliament and Government, non-enforcement of laws, corruption of state structures and a considerable part of the economy shifted into the "shade".

It is significant, that the yearly research of the Heritage Foundation (USA) shows that the Index of Economic Freedom (IEF) for Moldova has improved significantly improved in the first half of the '90s (price and trade liberalization, quality of monetary policy, openness of the country to foreign investments, etc.) and the rating of the country rose from the 8th from the end, to the 96th place among 156 reviewed countries. However, during the recent three years, the IEF for Moldova stood unchanged – 3.35 (IEF'98: Singapore-1.30, Ireland-1.95, Estonia-2.15, Hungary-2.90, Romania-3.30 … Cuba, North Korea-5.00).

The events of 1998 dissipated the illusions in the country. Both the Government and the population understood, that the monetary policy alone could not ensure a sound macroeconomic stability, while basic institutional and structural reforms were procrastinated, inconsistent, and sometimes even reversed.

So, what stabilizing factors have been applied in the economy of Moldova so far? Among main of them are: (i) non-payments, barter trade, clearing – which served as a mechanism of a non-monetary operating environment of the real sector enterprises, non-depending on cash flows and pricing signals; (ii) cash inflows from abroad, in the form of loans; (iii) rising import, due to a concentration of disposable funds at a "lion share" of economic agents, resulting a combination of the effects of first two factors.

To a lesser extent there were positive factors of the institutional and structural changes. This pertains first of all to the delay, up to the autumn of 1998, in adopting by the Parliament of the amendments to the Land Code, laws on energy complex reorganization, on bankruptcy, pension reform, administrative-territorial reform, etc. The work on Civil Code is going on already for the 5th (!) year. A serious demonopolization has not taken place in agro-business, energy delivery, transport and pharmacy sectors. The voucher privatization did not provide the enterprises with an effective system of corporate management and did not give them owners with stable motivation towards investment and development. In many cases this impeded restructuring of the industrial enterprises, which, as well known, started in 1995/96 after mass privatization, whereas in the agrarian sector, energy sector and other branches of the infrastructure it started even later. Bankruptcy procedures as mean of enterprises' financial recovery will be unleashed, apparently, only this year.

Inefficient legal regulation of various aspects of the economic life in conjunction with unreformed state machinery encouraged *emergence of corruption* and organized crime, hindering the private business sector. A considerable part of the business activities shifted to shadow economy, where the ownership right protection, contract execution, etc. are provided already based on different norms and methods.

Lack of a real control of state officials' activities, non-sanctioning of those not complying with the law, and on the other hand considerable arrears on salaries of state employees contributed essentially to extension of corruption in the Republic of Moldova. Any amendment to acting legislation does not have any positive expected effects due to the impact of corruption; the society does not develop according to market economy rules, there are no competition and progress in utilizing the disposable resources, state debt grows spontaneously, pauperization of the society deepens, there is a decrease of population's confidence in the state and conflict situations emerge.

It is hard to trust the information on the activity of the control organs, when the employees of those bodies did not receive salaries for 4-5 months. For them accepting bribes becomes the only source of surviving. That is why, starting from 1998 the data on criminal statistics, including that regarding the economic crimes becomes more "optimistic". Therefore, with the beginning of 1998, official data regarding the results of audits and inspections report a "diminution" of the average amount of fiscal evasion registered per tax payer. Also, in 1998 there were registered 2910 violations of economic and financial legislation, by 244 less than in 1997, losses being estimated at 103 million lei. Chişinău City Police marked a 13% decline in registered crimes, although 298 cases of criminal files concealing were discovered. By the beginning of 1999 statistical data of the Ministry of Internal Affairs shows an 11.4% increase in the total amount of crimes, after a decrease of 14% announced at the end of 1998.

A vicious circle is being created: corruption → economic decline → shortage of funds in the budget → arrears to state wage earner salaries → corruption growing.

Only corruption could be an explanation of the fact, that the Republic of Moldova imports natural gas at a price much higher than the world price, and at the same time it does not charge fees for gas transit through its territory (for information we would like to stress that the collected amount for gas transit through the Ukraine could be comparable with the GDP of Moldova). More strange seems to be the fact, that on the territory of Moldova (right bank of the river Nistru) there are no gas meters, therefore the volume of consumed gas is estimated based on the data of the neighboring countries, connected to the same pipeline.

Financial sector problems. The situation in the financial sector during 1998 was quite troublesome. Here are the conclusions drawn with respect to the 3 main policy orientations – NBM's interventions in the foreign exchange market for supporting the national currency, foreign debt servicing, and internal debt.

NBM interventions in the FX market. Even before the Russian crisis began, an alarming sign represented massive sales of hard currency by the NBM at the Interbank Foreign Currency Exchange. For the first time since the introduction of the national currency NBM's net transactions at the Bourse were negative for many months in a row during January-July 1998. In total NBM sold $41m more than bought during this time. Such a reduction of central bank's hard currency reserves could have had a serious impact on the exchange rate even if no Russian crisis was supposed to happen.

Then, right after the crisis started, NBM intervened massively at the Bourse defending the leu (in spite of warnings from IMF and others), and only during August-October 1998 it blew out another $81m out of its reserves. Thus, total losses reached almost $123m.

Starting November 2, 1998 the NBM decided to withdraw from selling hard currency at the Interbank Currency Exchange. At the same time it increased banks' reserve requirement to 15%. Official exchange rate is being set as a weighted average of rates of the banks' foreign exchange transactions.

It was a long way to this wise decision, which should have been done already somewhere in the first quarter of 1998. And it is advisable that this non-intervention policy remains such during 1999.

External debt servicing. Another aspect linked with the official foreign exchange reserves reduction is the need to service external debt, which implies transfer of big amounts in hard currency for the repayment of principal and interest.

In 1998 Moldova had to repay more than $200m for foreign debt servicing – interest and principal. But the state external debt has not been entirely serviced – some of it, such as debt to Gazprom was not serviced at all. And since the Government and the central bank have not received any loans from IMF and World Bank for more than an year, the NBM was asked to finance out of its reserves a part of Government's external debt servicing. Moreover, at the very end of the year NBM fully redeemed the $30m Government's private placement through Merrill Lynch, issued in 1996. Consequently the gross NBM's reserves dropped to $144m at end-1998, comparing to $366m at the beginning of the same year.

In 1999 the situation will not be easier at all – the country will have to repay about $220m for foreign debt servicing. And the only way out, in the light of huge trade balance deficit, seems to be the new borrowing, mainly from the IMF and World Bank, which provide most attractive crediting.

Internal debt. At the same time, a big problem started to represent the country's internal debt. During 1998 interest rates on Treasury Bills have been continuously growing, reaching already the 40% limit right after the Russian crisis began. Having a rising deficit in funds to finance the current spending, the Government was more intensively trying to attract financial resources from local banking system and foreign investors in order to finance the budget deficit. Obviously, in order to place more securities the Government was pushing interest rates. However, this did not help much, on the contrary – there were dramatically increasing the needs to service this internal debt. Starting June 1998 the proceeds received from sale of securities did not even cover servicing of T-Bills issued earlier.

In October 1998 sales of T-Bills dropped dramatically, while most foreign portfolio investors withdrew their investments (their share in total state securities issued being one third). In order to activate the securities market, NBM, which had to maintain the system alive since the Government did not have funds to do it, decided to introduce in November the mandatory requirement for commercial banks to hold 10% of their assets in the form of state T-Bills. This in the end helped to stabilize the situation, and the securities market slowly revived.

The lesson is, as it was pointed out in CISR previous reports as well, that the Government must sell state securities utmost in the amounts needed for servicing the ones issued before, finding other ways to reduce the budget deficit, for instance by cutting the spending and not by continuously borrowing (from the Central Bank, banking system or foreign investors).

With reference to the situation in the *banking system* it must be said that the commercial banks remain relatively undercapitalized, though in lei terms most of them well meet the NBM capital requirements. Starting 1 July 1999 minimal capital requirement will be increased from 8 million lei to 12 million lei, and from the next year it will be already 16 million lei. In order to improve the banking supervision, reduce risk and secure population deposits NBM is increasing requirement on capital adequacy subjected to risk (beginning with January 1, 1999 - minimum 10%). The issue of a deposits insurance corporation is unlikely to be developed further due to the inflexibility of NBM's position, as well as reluctance from international financial institutions which have doubts about the efficiency of such an institution and sources of its financing.

The issue of high systemic risk remains on the agenda, especially following the effects of the Russian crisis. Real interest rates remain high. Reserve requirement remains at 15%, though the Central Bank claims it will gradually reduce it during 1999, though depending upon the situation in the financial market.

Macroeconomic stability in the Republic of Moldova during the recent years needed one critically important component – *a balanced budget.* The overall deficit of the consolidated budget (state budget plus local budgets) during 1993-1998 varied between 5.8-9.1% of the GDP and imposed constant search of some internal and external sources for its covering. But these sources are very costly and virtually impede the flow of credit to the real sector. In this regard, the 1998 has been one of the mostly difficult years of the transition period, since there was a steep decline of the incomes to the budget.

As a consequence of the state weakness the fiscal evasions rose. To this fact contributed also the customs territorial "transparency" of the Republic of Moldova.

As a result, in the budget were collected incomes in the amount of about 2600 mil. lei, which in nominal terms show a reduction by about 250 mil. lei as compared to 1997, at the same time the amount of arrears to the budget increased. It should be mentioned, that cash amount of the overall budgetary incomes account for only 63-65% of the overall incomes. Barter transactions, netting out and payments in kind continue to be a considerable impediment in the development of financial-budgetary soundness.

Given that the access of the Republic of Moldova to the external financial markets has been virtually null, whereas the domestic market does not own sufficient capacities for lending to the budgetary system, a relatively low level of the budgetary deficit was registered (about 250 mil. lei). Starting May 1998 the net domestic funding of the budgetary deficit became negative, a fact that demonstrated, that the banking system and other Treasury bills and bonds (TB) investors did not want any longer to lend to the state even at growing interest rates, given that the risks were also on the rise. External funding practically was not available.

Thus, the expenditures of the consolidated budget has been executed in volume of about 2.850 mil. lei, the cumulative expenditure arrears of the budget being at a level of more than 1 bn lei. Considerable arrears have been registered in terms of salaries, payments for goods and services, scholarships, etc.

The burden of 1998 problems passed to 1999. Amongst the main problems that will impede the budget execution in 1999 could be pointed out the following:

- Customs territory transparency. The formal bodies of the Republic of Moldova are controlling only 65-70% of the territory. The problem keeps aggravating also due to corruption of the customs bodies, as well as protection of some cargoes by state officials;
- The budgetary system, particularly during the first months of the year, will be deprived of incomes due to shifting to a new system of VAT calculation for trade relationships with Russia, Belarus and raions from the left bank of the river Nistru. This has been already confirmed in January 1999. It could be mentioned about the reduction of incomes pertaining to export oriented sector, particularly on the income tax and incomes from foreign economic activities;
- Barter transactions, netting and payments in kind will further contribute to deterioration of the public finance system. It is urging to decide on banning similar activities, more over because the given practice generates a rise of both mutual indebtedness among the economic agents and the latter and public sector;
- In similar conditions budget execution in terms of expenditures will be difficult. It is at stake the capacity of the state to fulfill its priority functions: in maintaining public order, education, health care, social assistance, referring to servicing both the external and internal liabilities. At the same time the state would no proceed officially to staff dismissal, thus maintaining a tensioned situation in the society. Most tariffs on electrical power, natural gas, thermal power (after Dec. 24, 1998) make the normal run of budget funded institutions impossible, because that increase has not been stipulated in the budget law on 1999;
- A continuous problem will be that of salary payment. According to the estimates, the state will not be in position to pay neither current salaries, let alone the historical debts in this regard. Political will is required and consistency in dismissing sharply the public sector employees, including public administration, as well as transmit to private sector some objects, whose maintenance are costly to the budget;
- Servicing the external state debt, in condition when the leu will fall in value even more, will cost the budget more than 25% of the overall expenditures, a fact which can reduce to zero any other state expenses. It is necessary to run a tough policy in monitoring and addressing the external state debt, because, unfortunately, the self-regenerating process of the debt has started.

Capital market. In conditions of transition to market economy the capital market becomes the main source of economic growth. The access to the financial resources is the primary condition for re-technologizing, access to know-how and overall scientific and technical research realizations.

The main condition for investment attraction is the stability in the country. In 1995 the Ministry of Finance decided that the only source of budget deficit funding would be

Treasury Bills and Bonds (TBs), placed both on domestic and foreign markets. This fact substantially contributed to reaching a stability of the national currency and diminishing bank interest rates. By issuing TBs the Ministry of Finance targeted two objectives: to obtain a non-inflationary source of funds, support the development of the capital markets and offer a practical instrument of running monetary policy. The NBM declared the TBs as mostly liquid securities. The incomes obtained from TBs are not taxable (according to the budget law on 1998-1999).

The pyramid of the securities market in Moldova has been existing for more than 3 years, and, almost collapsed in the second half of 1998. During August-September there were sold TBs in the amount of 176.56 mil. lei. At a supply rate of 330 mil. lei, the average rate of interest rose to 35.5%, and subsequently to 43%. In 1997 the average rate of interest for 28-91 days maturity TBs constituted 22%. This was an excessive interest rate in conditions of an 18.3% inflation rate. The declining volume of sales could be explained by market supersaturation – in conditions of general poverty few can afford to invest in securities; lack of trust in the new government, formed in May 1998, as well as loosening of confidence in these financial instruments' liquidity.

As a result, in August the accumulated funds were sufficient only for redeeming the securities issued previously, the threat of budget deficit deepening being still persistent. TBs with a 7-14 days maturity became mostly liquid and enjoyed most popularity. The steep fall in value of the leu in October undermined the trust in the national currency stability; the securities bearing a stable interest rate became far too risky. In December 1998-January 1999 the demand for TBs started to surpass the supply. Yet, this increase was caused at most not by the sure and big incomes supplied by these TBs, but by the NBM's regulation, according to which 10% of the commercial banks' assets had to be in the form of TBs. Later this ratio was lowered to 5%.

The first experience of Moldova with international loaning through Eurobonds was successful. Ministry of Finance issued through Merrill Lynch $30m in 1996 and $75m in 1997. The first Moldovan $30m bond was issued in 1998. Yet, the financial crisis determined the investors not to prolong for an extra-year the repayment of the $30m private placement issued in 1996 for 2+1 years. Moody's rating agency decreased the sovereign rating of Moldova from 2ab to 3.

In 1998 at the Stock Exchange of Moldova were sold 75 mil. shares worth 438.2 mil. lei, twice as much compared to 1997. The sales record was registered in December, when the operations volume amounted to 93.8 mil. lei. More than 30 brokers' companies are registered at the Bourse. Almost 900 companies are registered at the Stock Exchange of Moldova, but only 20 comply to the requirements in order to be included in one of the listing categories. The first incomes of the bourse – about 91 mil. lei and its shifting to self-funding occurred in 1997.

At present virtually there are no opportunities for portfolio investments in the securities market of Moldova. As long as the corporate securities do not generate incomes, most of the JSCs do not pay dividends, emergence of portfolio investments is not likely to occur. A good deal of purchasing operations are effected with a view to obtain the package of shares of one or another company. After the investor obtains the controlling package of shares, the other shares virtually loose their value. After the completion of privatization and ownership distribution there is a threat of stock exchange importance diminution.

Thus, the secondary securities market can be considered closed. The primary corporate securities market is closed too. Most of new share emissions are made on the condition that its old owners preserve the control upon the enterprises. In addition to that it is very complicated to obtain veritable data about the local enterprises. In 1997, for instance, only circa 300 companies published their yearly balance-sheets. A serious competition can be seen in the extra-bourse market. In 1997 those transactions amounted to about 60%, in 1998 having dropped to about 40%.

An important step towards creating a civilized securities market was the foundation of National Depository of the Securities Market. This structure is pre-targeted to facilitate the clearing operations, and recording the transactions carried out at the Bourse. Also, the Depositary hinders from the performing illicit over the counter operations. The Depository encountered a serious resistance on behalf of the independent registrars. Another problem faced is the regulation on mutual payments. Only the NBM holds this exclusive right in Moldova, thus the activity of the Depository being burdened.

At present in the Republic of Moldova operate 43 companies that provide insurance services to population and legal entities, their income making up 104 mil. lei. The law of the Republic of Moldova on bills of exchange was adopted in 1993, yet, the bills of exchange are not used at large. The reasons are the difficulty of the legislation and mechanism of issuing and legal supervision in case of their non-payment, lack of population confidence towards the financial and banking system, lack of quotation mechanisms of shares at the bourse, the advanced risk of bills of exchange as compared with other securities in circulation on the territory of the Republic of Moldova. The issue of the bills of exchange is convenient both to the commercial banks, which get a source of funds attraction, as well as of the enterprises, that can perform faster mutual payments.

In September 1998 there was adopted the strategy of reforming the pension system, in October there was promulgated the Law regarding the state insurance pensions. The Law on private pension funds was adopted in March 1999. Yet, those mechanisms are not viable. Creation of personal pension accounts for the inhabitants of the republic is procrastinated.

The Republic of Moldova needs a well shaped and efficient securities market: it is necessary to reschedule the internal debt into an external one for a longer run and a lower interest rate than the domestic one – of about 30% as of today; it is necessary to create an agency for rating–indexation of securities in circulation on the Moldovan market (the creation of the Mobias Intelligent Finance independent company is a good initiative in this context); in condition of chronic non-payments, it would be desirable the permission of payments to the budget by way of bills of exchange; salary and pension arrears could be paid in shares or other types of securities, sold subsequently on the secondary securities market; in conditions of a functioning equity market enterprises could attract funds at lower rates than bank loans.

Real sector of economy. If one would divide the economy into the financial and real sectors, then everybody will agree, that it is the real sector that is the basis of the economic development of such a country like Moldova. It will be fully logically to ask the question: which are the results of this sector development?

Macro-level:

- Drop of real GDP three times compared to 1990 – is almost an unique phenomenon in terms of dimensions amongst CIS countries, it also having beaten the record in its low level per capita amongst the CIS countries – below US$ 500;

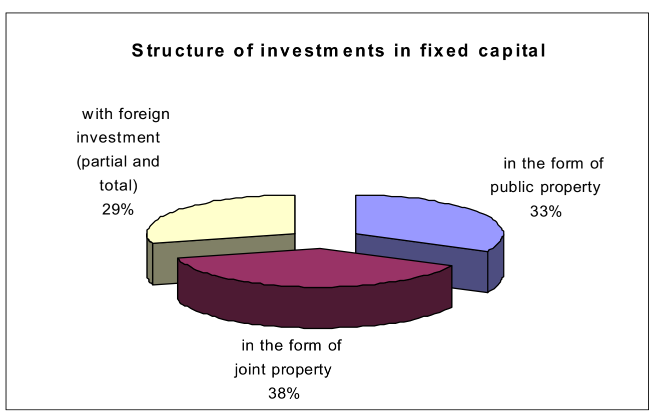
- The country consumes more and saves less, the GDP structure, calculated based on final usage method, shows an insignificant growth of the final consumption (from 57.5% in 1992 to about 97% in 1998); The state structure is more and more costly for the society (from 5.4% of the GDP five years ago to 27% in 1998).

- Dramatically declines the gross accumulation of fixed assets (from 59.8% of the GDP in 1992 to about 24% in 1998). According to the economic canons, this would cause an economic fall in the long run.

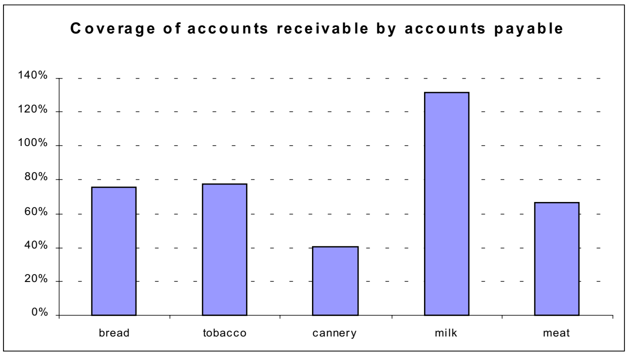
Diminishing investment into the public and private enterprises is partially compensated by the investment into foreign companies and joint-ventures. Regardless to the fact, that as a result of the enterprise privatization the number of private enterprises and joint-ventures increased, and the number of public enterprises decreased, investments into fixed assets in both of those two sectors have diminished as compared to 1994 by 40% and 55% respectively. The yearly volume of direct foreign investments during the recent years in Moldova amounted to $50-70m or $15 per capita per annum. The structure of investments into the fixed assets in 1998 is displayed on the graph.

A particular role in investing must have been played by investment funds, however they do not have enough funds, their activity is poorly controlled, the rights of small stock-holders of these funds are virtually unprotected by law. In 1998 the idea of creating technical parks and free entrepreneurship zones, oriented to export was not capitalized on, that might have broaden the inflow of investments.

Industry. In 1998 the industry accounted for about 58-60% of the early '90s level. A particularly deep drop was registered in light and furniture industries and machine-building complex. As a result in 1998 the production capacities of about 2/3 of enterprises were used at 10-20% of capacity, with all consequences deriving therefrom.



Industrial enterprises maintained a high level of dependence has been preserved of the from agriculture. The fall of overall agricultural output considerably impacted the level of the industrial output as a whole. Moreover, the pace of agrarian sector restructuring continued to be low, and that conditioned a catastrophically low level of investments in this sector.

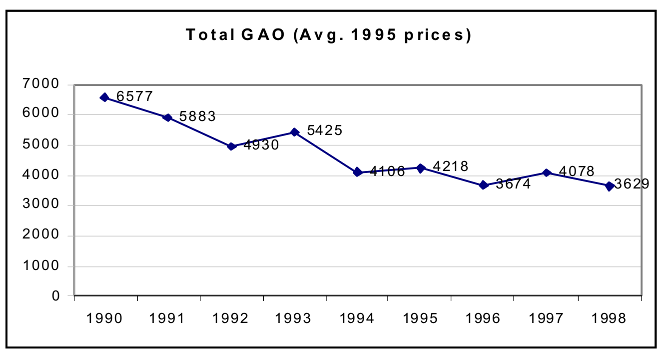


Financial discipline in the economy continued to fall, bankruptcy procedure has not been practically applied for the financial recovery of the enterprises. Accounts receivable as on October 1, 1998 reached the volume of MDL 19.3 bn., having soared as compared to October 1, 19997 by 26%, whereas accounts payable reached the volume of MDL 13 bn., having increased by 14%. The enterprises' liquidity considerably reduced, accounts payable cover the accounts receivable only at 68% (in 1997 this indicator for 74.5%). The level of this indicator for processing industry equaled 54%, its position in certain branches being displayed on the graph.

Delayed structural reforms in the energy sector led to its degradation. An increase in tariffs for energy sources was not backed by a clear and real system of compensations for the poor population, this is why on monthly basis only less than 5% of the natural gas consumers paid for it. State debts on gas soared to US$ 90 mil. Besides, increase of tariffs for energy fuels and introduction of 5% duty on raw materials import diminished the competitiveness of the Moldovan products. The efficiency of energy sector enterprises' operation will depend on how qualified will be organized the process of attracting a strategic investor.

Agro-industrial sector. Moldovan agriculture remains hobbled by big insolvent agricultural enterprises and by small poorly equipped farms, both being unable to compete with Western producers. The situation of the agrarian sector is much worse compared to the first years of reforms. Now whatever might be the combination of measures, the situation is likely to deteriorate quite a bit further.

The gross agricultural output (GAO) during 1998 shows a decrease mainly due to the slump in horticultural products. Almost all crops except for vegetables, sunflower and potatoes showed a decrease in harvested volumes: cereals by 29%, corn – 47%, sugar beet – 16%, fruits and berries by 73%.



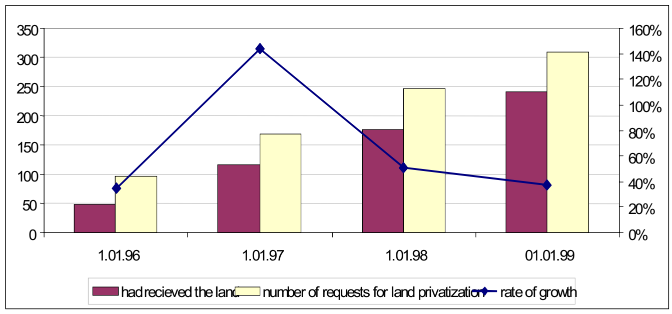
The reduction was caused mainly by reduction in yield rates per hectare (especially fruits - by 74%), surface of cultivated area, delay in harvest campaign, use of fertilizers (1-2 million tons compared to needed 8 million tons annually), phyto-protection of plants, etc.

In 1998 most of processing enterprises used their assets at 30-35% of their capacity, and some of them are even stationing, their employees being sent on forced leaves. The volume of agricultural production constituted 85% of 1997 level. The sugar processing enterprises produced 25% less, canneries – by 23% less, wineries – by 28% compared to previous year. Production of meat processing factories is on continuos decline. Only two factories out of nine are functioning. On the same period, dairy enterprises showed an increase in production by 125% as compared to 1997. Worsening of the industrial processing sector during 1998 can be explained by lack of raw materials, lack of funds, impact of Russian financial crisis, outdated technologies and high product costs, that lead to non-competitiveness of domestic products, insolvency of main sales markets (Russia, Ukraine and Romania) and lack of new solvent markets. According to estimates of the Ministry of Agriculture and Processing Industry the national economy incurred losses of 1.5bn lei, the state budget having missed to collect some 250 mil. lei.

In 1998, the share of individual sector in GAO increased by 10% and constituted 61% of the total. The private sector showed better results in both crop production sector (55% of total) and livestock production (61% of total). As of 1 January 1999, the total number of landowners constituted 241 thou. Thus, during 1998 their number increased by 66 thou (29%).

The chart on the right outlines the pace of ongoing land reform. Indicators show that 1996 is the most progressive year of land reform, then followed an acute decline in 1997 and a further decrease in 1998.

Land privatization



Very soon the land will be privatized and distributed to farmers. But the end of agriculture reform is still far, because it should continue with property consolidation, modernization of economic and production structures. New landowners need support, as they lack financial resources and relevant experience in the new circumstances. Recent adoption, in the first reading, of President's proposal regarding the legislation on land, which accepts depriving the land owners in case when they do not farm the land plots, is not a proper approach on behalf of the state to supporting new owners. This stipulation is contradictory to the stipulation of the Constitution of the Republic of Moldova on land owner rights. The land owners shouldn't be sanctioned in case when they decide not to use the land plots. Penalties should be imposed by the state in case when non-processing of land plot affects the surrounding land owners. In this situation elaboration of more efficient mechanisms of farmer support is required.

The slow pace of ongoing reforms is very expensive to the state budget. Historical debts of the agricultural enterprises constitute on average over 2bn lei. From a number of 1493 agricultural enterprises 65% have debts bigger than their sales, 28% have debts of 1.3-3 times bigger than sales and debts of 1.3% of enterprises surpass 10 times the volume of their sales. The financial situation of agro-industrial complex is even more deteriorated by the delay in making decision on restructuring the agricultural producers' debts and lack of efficient legal bankruptcy mechanisms. If this problem is not solved during the nearest future it will lead to a sharp increase in the share of shadow economy and theft of state and private properties.

In the difficulties with the budget deficit there is no hope anymore for granting subsidies or privileged loans to agriculture. The privatization process is not finished yet, and questions emerge on undertaking measures, which could stop the continuous demolition of the private and public property. The sector is continuously shrinking its working capital and barter transactions are increasing. The situation in which loans are not available, the expansion of barter transactions in the agrarian sector is inevitable. The major problem is not lack of food but the lack of financing for performing food procurement. The mechanism of payment for debts in kind is becoming a major impetus for trade destabilization: producers are offered lowered prices in order to increase the food coverage of their debts. This will lead to a decrease in agricultural prices and continuous deterioration of producers' financial position.

One may say in conclusion that there is a need in a funds inflow - banking capital into the credit market and foreign investments. Only for currents needs the sector needs on average $180-200m (ARA's estimation). In other words, one can not expect a considerable improvement in the financial situation of agro-industrial sector this year.

Domestic trade, paid services. The economic crisis, falling purchasing power of the population and trade shifting to shadow economy caused the decrease, during 5 years, of the retail commodity turnover indicator by 40%. It is hard to believe, that the organized market accounts for almost half of the entire commodity turnover, if to calculate the volumes of commodity sales per capita, displayed by the statistics per annum (!): 2.5 kg. of meat, 600 gr. of fish, 200 gr. of butter, 700 gr. of oil, 1.9 kg. of potatoes, 3.4 kg of vegetables, 7.6 kg. of fruits, etc. The rural population (54% of the total) accounts for 26% of the commodity turnover, which proves again, that the rural localities pauperize faster. The private sector accounts for 74% of the overall commodity turnover. It is worth mentioning, that the commodity circulation of the public enterprises expressed in fixed prices of 1992 remained practically unchanged (about 8.7 thou lei), the same indicator in the private sector decreased almost 2.5-fold (from 10.3 thousand lei in 1992 to 4.2 thousand lei in 1997), which proves to a great extent a hiding of incomes in the private sector, rather than a lesser incomes of the latter.

The volume of paid services rendered to population has fallen since the early '90s in comparable prices by 75%. The structure of rendered services has changed: the share of social services decreased and increased the share of communal and communication services. This to a great extent could be explained by uneven rise of prices on this type of services. Most of all rose the prices for communal services, transport and communications. In the structure of ownership prevails the state sector (86%).

External trade. The indicator of economic "openness" of Moldova in 1998 reached 115% [(export+import)/GDP], this being the reason of exposure to external shocks and openness of domestic market to imports of poor quality goods. Problems which draw the attention here are:

- The peripheral nature of the economy has extended – in export structure grows the share of unfinished products (raw materials). The export structure became more agricultural-prone, and respectively more depending on climate conditions in an environment of non-irrigated farming (the share of agro-industrial complex in the export rose from 40% in 1992 to about 70% in 1998);
- The republic became monopsonistic, a considerable dependence of exports from one country–buyer (the share of Russia as main importer of Moldovan goods increased from 40% in 1992 to 61% in 1998). On the other hand, 80% of energy resources, such as coal, coke, gasoline, diesel fuel, and 100% of natural gas is imported from two countries – Russia and the Ukraine;
- By December 1, 1998 a decrease was noticed in net export from $94.6m in 1994 to $366.1m. In comparable prices of 1994 (millions of US dollars) exports changed slightly, whereas the import rose by 40%. The anticipating pace of growing prices on export as compared with import prices – is a positive phenomenon, yet, ephemeral, caused by the equalizing prices on domestic and external markets. Weak export flexibility to changing real exchange rate of leu and big share of energy resources in the import make the mechanism of export encouraging through changing the real exchange rate of the national currency almost impossible.

The consequences of the Russian crisis were dramatic for Moldova, due to its big dependence on the Eastern market. On the one hand, the trade share with CIS countries decreased from 87% in 1991 to 35% in 1998, yet, from the other hand the export volume of Moldovan products to other countries also diminished and accounted for 74% of the 1995 level. The enterprises need investments in order to raise the quality of goods to international standards. However, enterprises chose the path of least resistance and sold production on the CIS markets, which do not have considerable requirements in terms of quality. Meanwhile, during late months of 1998 the export decline in the CIS countries was much deeper, that in other countries.

A particular role in the export to other countries plays the production of light industry, which reached 1/3 of the overall volume of export to those countries. Taking into account the preferential system provided by the EU countries to Moldova, the above mentioned production is a priority for promoting to the market of the other countries. While the export of food industry to those markets declined by 36%, the export of textile industry output and its articles increased by 22%.

Privatization and the private sector. One of the negative lessons of 1998 is that for the fate of the national economy is crucial to reach a mutual understanding between state structures and entrepreneurship. Meanwhile in Moldova the entrepreneurs became already a real power, which require a proper treatment. In a democratic society the Government should find a consensus with the businessmen at least for increasing the taxes inflow. As a result of administrative pressures on businessmen more and more economic agents shifted to the shadow economy, thus broadening the scale of smuggling and corruption and avoided tax payments to the budget.

During recent years three privatization programs took place in Moldova: for vouchers (1994), mixed (1995-1996), and for cash (1997-1999). As a result of the first two programs the formerly state property was “disaggregated”.

Proceeding from the need to complete the incomes to the budget, as well as urged by the international financial organizations in 1998 a certain progress was reached during the cash privatization (the energy sector, Moldtelecom, Moldova-Gaz, Rezina Cement Plant, “Floare-Carpet”, and others); it is not clear yet, how come, Moldova having submitted 50% of the share package of Moldova-Gaz, worth $290m, decreases its debt to Russia only by $47m, or, that in conditions of collapsing Russian ruble the Moldovan wineries on the territory of Russia are evaluated in rubles and not in US dollars? The sale of Moldtelecom does not contradict the Law on Monopoly.

It is still arguable the question of the share of private sector in GDP, because the private sector includes also such formations as collective-farms; a process is taking place of mass shifting of private economic agents to shadow economy. The private sector broadens, whereas the official statistics continues to provide distorted picture of its functioning by false conclusions. Thus, according to the latter, the productivity in the industrial sector is 3-4 times higher in the state sector as compared with the private one, or another conclusion - putting into operation of residential houses built up by private builders during the last 7 years diminished more than 3 times.

Shadow economy in 1998 reached dimensions, that were dangerous for the economic security of the country. The reality is, that the hard but “non-compulsory” tax burden (of about 50%), and the lesser, but obligatory informal burden (40% payment for the “political cover”, briberies to the bureaucratic machinery, payments for avoiding the artificial barriers for an economic activity, etc.) place the economic agents before the dilemma: bankruptcy or going to succumbing to shadow economy. Another circumstance – budget problem of the state and its capability to stimulate the work of the controlling bodies in due manner, non-payment of wages for some months corrupts and decreases the interest of the controlling bodies in tracing out the economic and financial violations.

As a result, shadow economy developed fast (its share as compared to formal economy grew from 25% in 1992 to 40% in 1994 and 55-60% in 1998). According to estimates, tax evasion increased from 3% of the consolidated budget income to 25%.

Financial and economic discipline violation frequency traced out by the employees of the Department of Revision and Control increased to 78%, whereas the frequency of economic legislation violations, revealed by the personnel of the Main State Financial Inspectorate – to 55%. In 51% of the performed controls by the Department of Standards, Metrology and Technical Supervision are unveiled violations from the norms; in terms of imported production this indicator accounts for 80%.

The transparency of the Moldovan borders, difference in customs and fiscal regimes on the territory of Moldova, Ukraine and Russia lead to many illegal export-import operations. Thus, comparison of import-export operations data traced out deviations of 92% of export transactions to Russia (1996) and 100% exports to the Ukraine.

Social implications. The phenomena, which occurred in the economy throughout 1998, have had significant adverse effects on living standards. With regard to this fact, statistical data reveal an *excessive decline in people's welfare.* The real monthly disposable income per person has dropped by 11% and reached its lowest level in the last four years –118 lei ($14). Consequently consumption of marketable goods and services has shrunk, giving more room to closed household consumption of homemade products. The share of expenditures for foodstuffs has extended by another 3% and captured almost 70% of the total household income. Disturbances in public finances and weak tax collection that prevailed throughout the period have *aggravated considerably salary/wages payments*, making paying off the arrears owed more difficult than ever before. If at the beginning of 1998 the overall stock of budgetary salary arrears accounted for 2 months, now we have entered the 1999 with a 4.5 months salary debt. The *financial viability of the social fund budget is very poor*. The chief reason is a low collection of social contributions. On average the ratio of tax collection did not exceeded 60% of the annual commitments. As a result, a great deal of both payable and receivable accounts has accumulated. In comparison with January 1998 the overall stock of pension arrears nearly doubled accounted at the moment for about 300 mil. lei. Due to lack of financial inputs into social fund budget, pension in-kind was practiced at a large scale; almost 50% of the total paid pensions comparable with 30% in 1997. The cumulative effect of financial disorderly adjustments has precipitated *income disparities and spreading of poverty.* The magnitude of income distribution is very large and constitutes 1:16. Changes occurred in income distribution were in detriment of the poor. The bottom 20% of the poorest population has shrunk their share from 5% to 4.3%, while the top richest 20% increased their welfare from 45% to 52%. Thus the rich become richer, and the poor become poorer. As a consequence, about 80% of the entire population live on daily incomes of less than $2.

Main lessons. Outgoing 1998 year had proved one more time the rule: social costs get higher and people's credibility weakens once reforms are procrastinated. In the social sphere the *pace of reforms was too slow* and attempts to make some changes were done in a controversial and shallow manner. Exception could be only legal framework where several important laws have been approved. We can mention here the Law on Mandatory Health Care Insurance (27 Feb.); Law on State Pension Insurance (14 Oct.) and Law on Minimum Medical Services provided by State (1999 Feb. 3). Several more couple drafts of laws have passed the 1st and 2nd readings in the Parliament, waiting for the final stage (Law on Non-State Pension Funds, and Law on Social Insurance). Attempts to pay off pension/salary arrears have fallen due to lack of consistency in promoting social reform. Government institutions were *conceived mainly with current issues,* acting as a fire-fighter brigade. Time, money, and efforts were spent on taking ad-hock measures, which brought some insignificant and temporary results.

Institutional network for implementation the new laws is not settled yet. In reality a huge gap between the new legal framework and outdated social security institutions can be seen. Consequently, pension, health care and other sector reforms stopped. Public social arrangements are too costly and badly targeted. Keeping further the *implicit nature of the social expenditures*, as well as the *broad range of the social privileges* could undermine the fate of the social reform. Undertaken desperate actions to fit expenditures with the revenues did not have a positive effect. Three times during the 1998 the social fund budget was revised towards reducing either of its sides, but the result was insignificant. By the end of the year pension arrangements were paid at 60% of their initial rate. Family allowances and compensations for public utilities are too diffuse and provided in a manner closed to the universal coverage. *Cross-subsidization* of the electricity and thermal energy tariffs is the most vulnerable point in the social safety schemes. They captured near 20% of the public budget revenues, and are convenient only for the companies which produce/deliver energy resources. Phasing out the subsidies could meet strong institutional constraints, making this issue politically sensitive. The *administrative capacity of social institutions is too weak*, and this could be a serious impediment for the implementation of the reform proposals. Besides that, lack of publicity of the aims and scope of the social reform have strengthened opponent's positions and intensified rumors which impacted upon the success of the reform.

Policy options. Among broad range of social issues which face nowadays Moldova the following three groups will exert more pressure during the 1999.

Financial imbalances. The main challenge is how to meet social commitments, particularly pay off salary/pension arrears within tough fiscal and budgetary constraints. In line with that, policy instruments should be designed in a *targeted and cost-effective* fashion. This involves the necessity of rationalizing social expenditures in context with public finance restructuring. It is expected to be revised the level and duration of benefits. Eligibility criteria would need to be tightly designed. With regard to subsidies, it seems that it is premature to completely phase them out. Therefore, it is more likely to take the pragmatic approach of *limited transitory consumer subsidies,* keeping a trade-off between narrowness of targeting and the budgetary costs of subsidies.

Institutional issues. Efforts should be focused on making more simple the administrative procedures and reducing operational costs. Meanwhile improvement of institutional capability is getting more crucial and this requires development of a new organizational network for social security schemes. As a result, we can expect changes in a personnel structure and even some lay-offs.

Legal issues. They will deal at the same time with two kinds of activities: designing new legal framework and giving room for making operationally the new adopted laws. That is why, for 1999 year it is more likely that the latter job will prevail in order to unfreeze pension and health care reforms. Also, enactment of ministerial legal procedures is required for setting up the new social assistance infrastructure.

The chance for "young reformers". As we can see, under the impact of both external circumstances and internal factors, the Moldovan economy fully displays its dual nature. On the one hand are evident all the features of the liberal economy – openness of the country, needed laws and institutions are available. However, the laws are not enforced, the courts of law do not apply them, the latitude of the shadow economy is large. A mechanism has not been established on developing socially effective decisions and their implementation. Many institutions - High Economic Council under the President, the group of advisers to the Government, Fund of Entrepreneurship Support, Agency for Attracting Investments, Agency for Export Promotion, Stock Exchange, etc. – stood still on the incipient stage. On the other hand, there are strong mechanisms of group interests' realization.

Ever now and then the emerged discrepancies between the power branches, frequent changes of the Government, trade unions' conformism and frequent elections (each 4 years – 3 election campaigns!) constantly animate the hopes of the population to change.

Apparently a political and economic system emerged in the country, that not only reinforces stagnation, but for which economic depression and political instability is an invigorating environment for existence.

Finally, in Moldova starting the spring of 1999 the young reformers – liberals, who have to carry out an open and understandable program of reforms, by trying to make a U-turn in bettering the situation, got a chance. The need of a "new economic policy" for Moldova is determined by the main circumstance – a real threat emerged for the security of the country. Many of its indicators are close to the critical bottom level, both economic and social[3].

In the created situation the main tasks of I. Sturza's Government, which was commissioned the mandate on March 12, 1999, are to overcome the acute phase of the crisis and to promote the reforms more actively based on the principles of economic soundness and social equity. The first block of problems, that have to be decided:

- determining the *"growth zones" in the national economy*, real sector and entrepreneurship development, by parallel reduction of shadow economy;
- *suppressing corruption*[4];
- *revitalizing the state budget*, increasing the rate of tax collection and rationalization of the state expenses, limitation of budgetary liabilities;
- promoting a more economically efficient *privatization (for cash)* oriented towards attracting foreign investments;
- completing the *"Land" National Program*, restructuring the loss bearing agricultural enterprises by way of setting up new market infrastructure for farms and rural population;
- increasing and *promoting export*, its reorientation to new markets, restructuring and retechnologizing for these purposes of the industrial enterprises;
- reorganization and privatization of the *energy sector*;
- reformation of the *social sphere* – pension reform, reformation of the education and health care systems;
- functional *restructuring of the local administration*, reestablishing the unity and territorial-*economic integrity of the country* (Transnistria).

Biggest part of the problems must be resolved already in the next years[5], through short term scenarios, some of them being long-term. It is fundamentally important, that while implementing both political and structural reforms, the Republic of Moldova enters the 21st century by activating its competitive advantages, otherwise it will become a niche to be filled by products and services of the other countries. Orientation to European Union, membership of WTO will play a vital role in this modernization process.

Ultimately, confidence is necessary. It is an important factor in economic performance: international political confidence with respect to Moldova and confidence in domestic politics. In many areas recent Governments have performed not so well, and we will hope that the new generation of political leaders will be more successful in their actions.

[3] "Moldova in Transition", CISR Economic Survey, No. 2, Nov. 1998, pp.6-7, 88.
[4] See the Annexes: "Corruption as driving force of the shadow economy".
[5] "Law supremacy, economic revitalization, European integration". Action program of the Government of the Republic of Moldova for 1999-2002. Chişinău, March, 1999.

2. MACROECONOMIC SCENARIOS FOR 1999-2002

The authors would like to express their appreciation for critical comments and suggestions they have received on the earlier version of the scenarios to Mark Horton, Resident Representative of the IMF in Moldova

2.1. General description

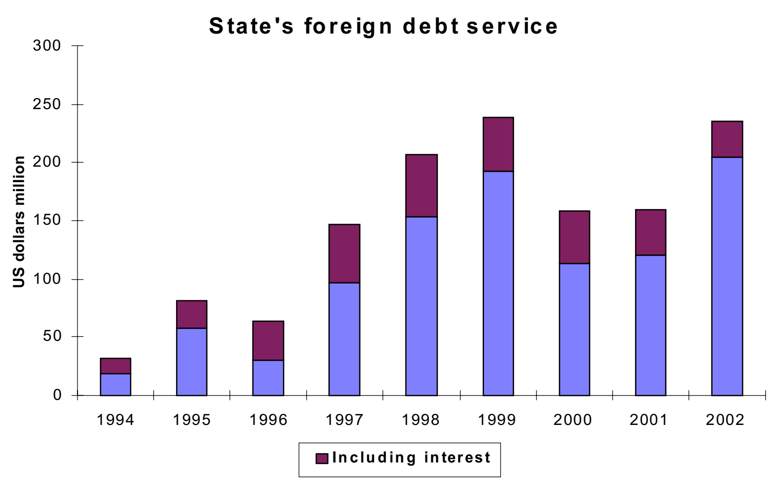
Two scenarios were elaborated for the evolution of the national economy for the period 1999-2002. They were based upon previously elaborated scenarios within the Strategy for Development of the Republic of Moldova for 1998-2005 (CISR, January 1998), which have been updated to take into account the dramatic evolutions at the end of 1998.

Hence, there are presented here:

- base scenario, also defined as the optimistic, or recommended scenario, which assumes that the Government of Moldova will advance economic reforms, in compliance with agreements concluded with international financial institutions, and thus managing to avoid a default of the country in honoring its external obligations;
- negative, or pessimistic scenario, which broadly reflects the destructive effects of a major crisis in the country's economy followed by announcement of inability to honor the external obligations. This is in some way a simulation of the so-called "Bulgarian path", when the country in the end counts exclusively on Western assistance in restoring the economy, accompanied by very tough measures of monetary supervision.

Foreign debt

As in the scenarios drawn up for the Strategy for Development for 1998-2005, the current estimations are to a large extent influenced by external factors, i.e. the necessity to service the external debt, for which large volumes of hard currency are needed. The peaks of foreign debt servicing will be in 1999, when the amounts needed for repayment of interest and principal for foreign credits will exceed $200m, and in 2002, when the $75m Eurobond launched in 1997 must be fully redeemed. Another problem here is the significant debt to Russia for energy resources.

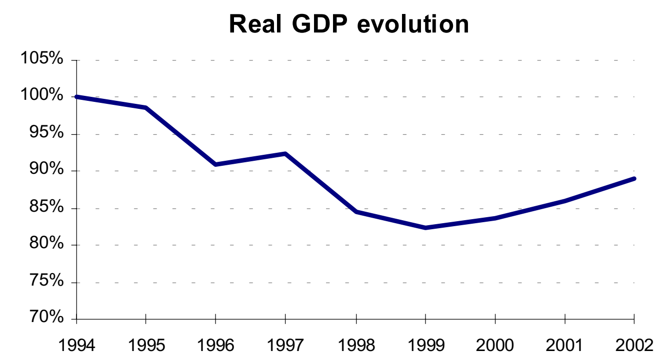


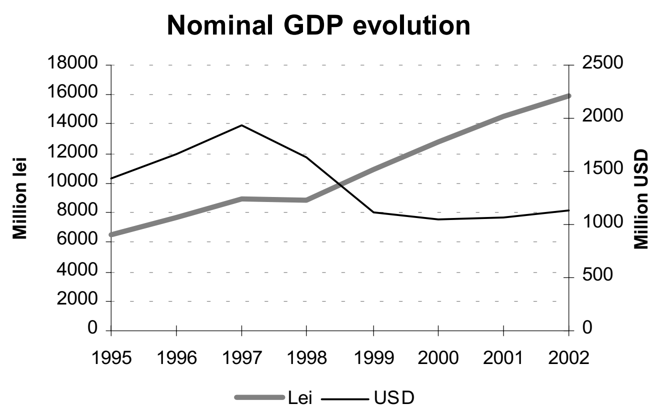
Very complicated in this context was the situation in 1998. Moldova had to repay about $200m for foreign debt servicing (including one third of it paid by the NBM to the IMF). Moreover, the external debt has not been entirely serviced – some of it, such as bonds issued to Gazprom was not serviced at all, while another part was negotiated and rescheduled. And since during this period of time the state received no loans from the IMF or the World Bank, the NBM had to "contribute" out of its reserves to the repayment of principal and interest for the loans received from international financial institutions, foreign banks and others. At the very end of 1998 NBM fully redeemed the $30m first private placement issued by the Government through Merrill Lynch in 1996.

In 1999, the situation will not be easier, because the country will have to repay about $220m for foreign debt servicing. The only way out, along with the reduction of the trade balance deficit, is new borrowing, mainly from the IMF and the World Bank Group, which do provide most attractive crediting. Thus, a lot remains to be done in 1999 in order to regain the confidence of these international finance institutions and prove the compliance with performance criteria.

2.2. Base - positive scenario

Gross Domestic Product *(in both scenarios GDP is forecasted without taking into account the shadow economy and excluding Transnistria)*





Forecasting of evolution of economic growth in the Republic of Moldova is very difficult to be done because of a number of factors. The main is extremely high interdependence between state's economic policy and political events that take place in the country. In this scenario, where economic reforms' processes will have a strong support by the society, political parties, all executive bodies, some concrete results could be attained, which will serve as a basis for an eventual stable economic development.

The real GDP forecast of the Government, set in the Budget Law for 1999 and in the NBM's monetary policy guidelines for 1999, pointed to a 1% growth in 1999. However, most recent indications are more negative. Taking into account the evolutions in the economy (tendencies of last months of 1998 and first months of 1999 were taken into account), we forecast in this scenario a decrease of real GDP for 1999 by 2.5%, followed by positive GDP growth figures for the period of 2000-2002, counting on channeling of investment into the productive sphere and relaunching of real sector enterprises' production.

Nominal GDP will grow continuously, exceeding by end of 2002 the level of 15bn lei. At the same time, due to the depreciation of the national currency, the nominal GDP expressed in US dollars will be decreasing in 1999-2000, afterwards slowly growing up to about $1130m in 2002. Respectively, GDP per capita could stay at $314 by 2002.

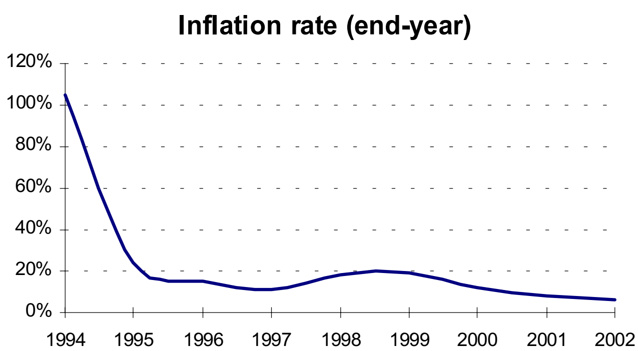
	Share in GDP in 1998	Estimation of real growth in 1999	Contribution in GDP growth in 1999
Agriculture	24.4	-5	-1.2
Industry	22.4	-8	-1.8
Services	37.7	3	1.1
Net taxes on goods and imports	15.5	-4	-0.6
Total	**100**		**-2.5**

With reference to the GDP structure by sectors it should be noted that agriculture will be in a decrease due to the process of reorganization and privatization that it is undergoing. Of course the results of the reforms will not be immediately seen. In industry, during 1998 and at the beginning of 1999, because of shrinkage of the domestic market, and especially of external markets, a continuous decline of production is observed. Services will have an upward trend due to the extending range of services, including in rural areas, retail trade, construction.

	Contribution in GDP growth in 2000	Contribution in GDP growth in 2001	Contribution in GDP growth in 2002
Agriculture	0.7	0.7	0.9
Industry	0.9	1.2	1.2
Services	0.4	0.8	1.2
Net taxes on goods and imports	-0.3	0.145	0
Total	**1.7**	**2.8**	**3.3**

Inflation

The annual rate of inflation for 1999 forecasted by NBM and set in its monetary policy guidelines for 1999 is 13-15%. The evolution of the leu's exchange shows a continuous depreciation which, due to the openness of the national economy and high share of imports, which implicitly generates corresponding increase in prices, i.e. growth of inflation level. On the other hand, due to a more complicated export environment local producers are trying to sell more in the domestic market, lowering the prices (according to recent changes in fiscal legislation, producers selling goods at prices lower than production costs are exempted from VAT). Thus, due to a saturation of goods in the domestic market, the prices are kept stable or are even falling, thus the CPI level is low.



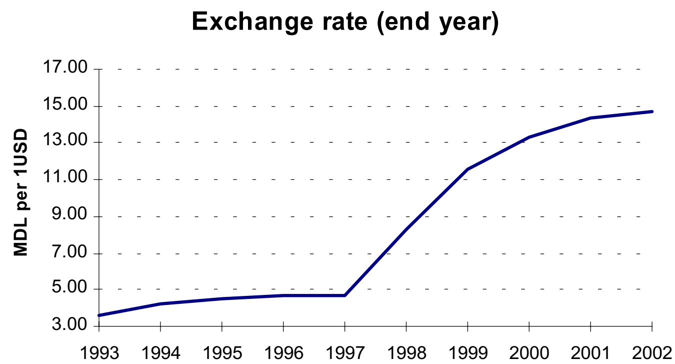
Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99	Jul-99	Aug-99	Sep-99	Oct-99	Nov-99	Dec-99	**Total**
5.4%	1.5%	0.6%	*1.2%*	*1.0%*	*0.5%*	*0%*	*0%*	*1.5%*	*1.5%*	*2.0%*	2.5%	**19.1%**

Data for the 1st quarter of 1999 show a cumulative level of inflation of 7.6%. Taking into account the seasonality of prices we would expect an almost nil inflation level during the summer with an increase by end of the year. Therefore, we consider a more realistic forecast of 19.1% for the 1999 end-year inflation, with a gradual decrease in the next years down to 6% by end-2002.

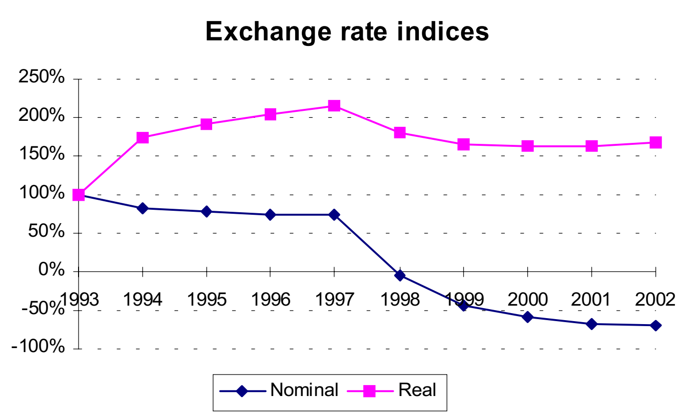
Exchange rate

Even before the Russian crisis began, an alarming sign represented massive sales of hard currency by the NBM at the Interbank Foreign Currency Exchange. For the first time since the introduction of the national currency NBM's net transactions at the Bourse were negative for many months in a row during January-July 1998. In total NBM sold $41m more than bought during this time. Then, right after the crisis started, NBM intervened massively at the Bourse defending the leu, and only during August-October 1998 it blew out another $81m out of its reserves. Thus, total losses reached almost $123m. However, gross NBM's reserves decreased from \$366m at the beginning of 1998 to \$144m at end of the year, i.e. by \$222m. The difference were obviously debt service payments.

Starting November 2, 1998 the NBM withdrew from selling hard currency at the Interbank Currency Exchange, letting the commercial banks to directly influence the exchange rate. As a result, the leu has depreciated sharply from 6.40 lei/1USD at 1 November to 9.71 lei/1USD at 1 December 1998. Then, the situation in the foreign exchange market has stabilized due to the NBM's strong enforcement of the 15% reserve requirement and 10% T-bills holding requirement imposed to commercial banks. And, for the first time after the crisis, the leu started to appreciate (and NBM even managed to buy \$16m in December), at 1 January 1999 the rate was 8.32 lei/1USD. Further on, depreciation started again but in a slow pace - by end of March the exchange rate was 9.16 lei/1USD. Thus, a new equilibrium of the exchange rate was reached, and the viability of NBM's new non-intervention policy proved to be successful. It is advisable that the policy of non-intervention at the Interbank Exchange for rate stabilization to be maintained in the future as well, and the main concern of the central bank must be to accumulate foreign exchange reserves, so drastically exhausted in 1998.



Analyzing the evolution of the real exchange rate (dollar-leu) it should be pointed out that for the first time since the introduction of the national currency, in 1998 the Moldovan leu has depreciated in real terms against the US dollar by 33.8%. This was due to the high nominal depreciation of the leu upon the dollar (USD/MDL - by 44%), while the inflation rate was at the end of period 18.3%. Consequently, the domestic prices expressed in US dollars have diminished by one third. Previously during 1995-1997 the leu was appreciating in real terms by 10-17% per year.



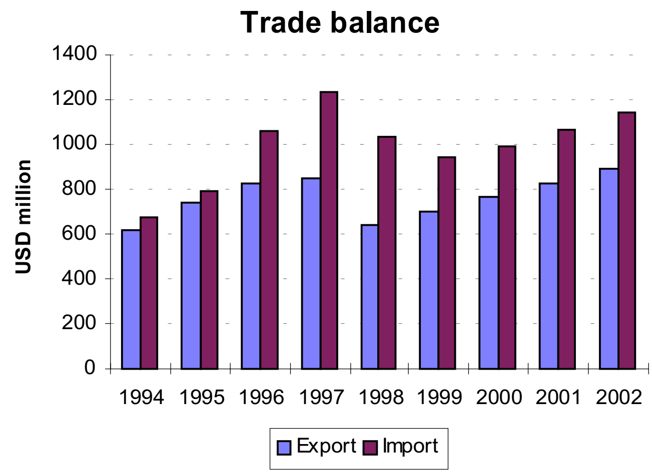
As it was already noticed above, Moldova has a small and open economy, to a great extent influenced by external prices. That is why, it is obvious that in the coming years a further big depreciation in real terms is impossible because huge nominal depreciation of the national currency leads to an considerably increase in prices in the domestic market, generating a respective growth in inflation rate. This leveling could have as a result an appreciation of leu in real terms, although not such big one as in previous years, so that the competitiveness of Moldovan exports would not be harmed.

In the scenario the end-year exchange rate for 1999 is forecasted at 11.6 lei/1USD, which, given the inflation forecast, means a depreciation in real terms of leu against USD by 14.4%. In 2000 the exchange rate of the national currency will stabilize further, reaching 13.3 lei/1USD, i.e. a real depreciation by only 2.6%. Further on – the leu starts to appreciate in real terms by 0.6% in 2001 and by 3.5% in 2002. By the end-2002 the nominal exchange rate of Moldovan leu against the US dollar will reach, according to the scenario, 14.7 lei/1USD.

Trade balance

The scenario is based on the assumption that *exports* will be growing continuously, within 8-10% during 1999-2002 (reforms are expanding in the real sector of the economy, more investments into the production sphere are channeled, including FDI, etc.). But only by 2002 the level of exports could overpass the level of 1997. Due to narrow orientation of Moldovan exports towards CIS and Russian markets, their volume in 1998 reduced dramatically after the Russian crisis (by 25%), falling slightly above the volume for 1994. It is clear that Moldova's export potential is much higher (of about $900m), but a reorientation towards Western markets will need some time - at least 3 years are required in order to improve the quality of exported goods, to adopt respective marketing strategies, and at last but not least - removal of institutional barriers (joining the WTO, etc.).

As regards to the *imports* it should be mentioned that under the circumstances of export reduction in 1998, the import decreased as well (by over 15%), because the country lacking foreign exchange could not finance the imports at the level of previous year. Apart from a 2-fold shrinkage in import of energy resources (because Moldova just could not pay), also there was a reduction of huge imports of consumer goods. From the same perspective, we forecast a further reduction of imports in 1999 as well - by 9% (especially share of energy imports). Only after 1999 an increase in imports is foreseen (by 6-7%), especially imports of equipment, technology, etc., which could be financed by FDI (growing as well).



Current account of Balance of Payments

The scenario assumes that the current account deficit will gradually diminish, showing a reduction by 3 times in 2002 comparing 1997 (from $309m to about $100m), or speaking about ratios to GDP - the reduction would be from 18% to 8%.

As factors contributing to this evolution are, as it can be seen in the annexed tables: trade balance reduction by about $150m in 1999-2002 against the situation in 1997-1998; reduction of services balance deficit (especially transportation, including imposing an appropriate tax on transit of energy resources through the territory of Moldova); and increase in current transfers (included here are grants that the country receives and income of Moldovan citizens working abroad).

Capital and financial account

Foreign direct investments

Taking into account budgetary and external constraints, it is obvious that under such conditions internal investments are greatly affected. As it was mentioned in the scenarios prepared for the Strategy for Development, the country, having scarcity of financial resources, has a continuous decline in gross internal investment, including investment in production facilities. Therefore, the only hope for revitalizing productions and increasing competitiveness remains the flow of foreign investments. Especially when internal savings are continuously decreasing, which is one of troublesome tendencies taking place in transition economies.

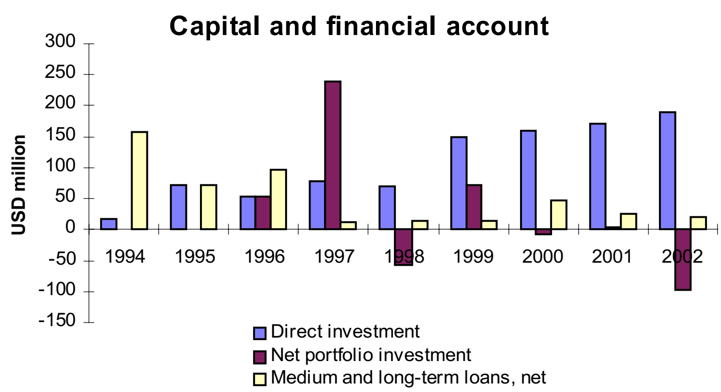
Direct investments will have in this scenario a steady growth. We forecast for year 1999 a flow of FDI of $150m with a gradual increase further on. Also, we count a lot on the projects of strategic objectives privatization which could additionally bring $50m in 1999 (in this optimistic scenario) as a result of Moldtelecom privatization, and about $200m during 2000-2002 obtained from privation of energy sector (although about half of this amount could go for repayment of debts for energy resources delivered by Russia). Thus, by end-2002 the stock of foreign direct investments could reach about $1bn.

Referring to some priority sectors for upcoming FDI inflows, the following 3 directions can be foreseen: (i) monopolistic sectors, such as telecom industry and energy sector, (ii) processing industry based upon local raw materials, (iii) after entering the WTO and signing of FTA with EU countries (1999-2000), a important flow of FDI would go into the light industry - clothing, textiles, shoes.

Portfolio investments

In this item there are included Moldovan securities (T-Bills and T-Bonds, as well as corporate stock) acquired by non-residents, as well as their servicing. Also, here are included private placements of securities issued by the Government of Moldova on external capital markets - in 1996 the first Eurobond ($30m) was launched, which was redeemed in 1998, and in 1997 - the second Eurobond ($75m) which must be redeemed in 2002.

In the figure for 1997 an amount of US$ 140m was included, which were in fact securities of the Ministry of Finance in favor of Russian company "Gazprom" for gas debt restructuring. In 1998 the Government of Moldova tried to negotiate restructuring of another $90m in securities but this transaction in the end has not been approved by "Gazprom", however, this figure is included in 1999 figures.



Another aspect is linked with the fact that after the Russian crisis foreign portfolio investors had massively withdrawn their investments in state securities. Most investors redeemed their T-Bills and T-Bonds, immediately converting the lei received into dollars. In this way by end of 1998 about $30m left the country. It is hard to believe that these investments will return soon into the country, in any case though this will greatly depend on country's positive evolutions in the economic reforms and subsequent rating agencies' reports. The scenario draws the figure of $5m in T-Bills investments for 1999 with a 5-fold increase up to 2001-2002.

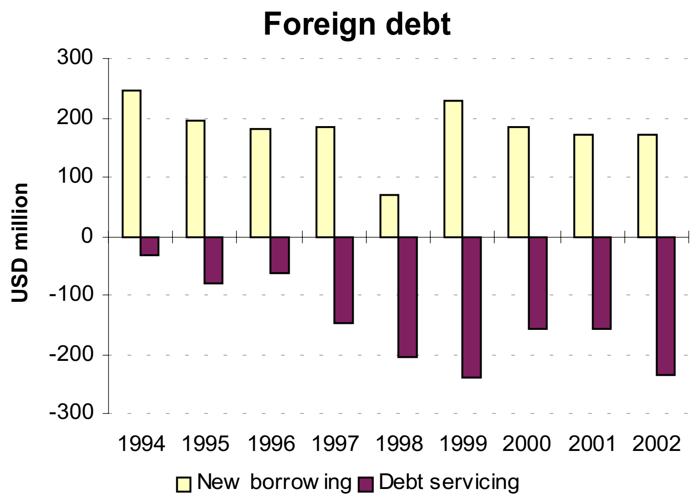
Long and medium term loans

A specific feature of the optimistic scenario is that the country will fully benefit from the support of international financial institutions (however, this support will be conditioned by Moldova's compliance with memorandums concluded with IMF and World Bank).

Therefore, especially because there will be needed considerable financial resources for honoring the obligations toward foreign creditors, and for overcoming financial problems in the period of active implementation of structural reforms, we forecast for the period 1999-2002 an annual flow of $80-100m of new borrowing that the country will benefit from: especially from World Bank (the remaining part of SAL2, the upcoming new loan SAC and other loans), from EBRD, European Union and other creditors. Also, an important role will have the private creditors providing another US$ 35-40m per year.

It should be noted here that the share of loans received for private sector support will be rising continuously, while the amount of credits granted to the Government of Moldova will respectively diminish.

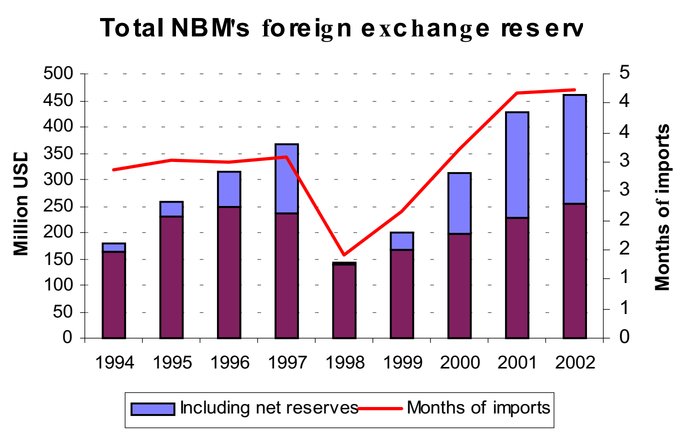
A very important role are having credits provided by IMF to the NBM for completing the foreign exchange reserves. In January 1999 IMF granted a new EFF tranche of $35m, bringing the total amount disbursed within EFF to approximately $87.5m. The Executive Board of the IMF also agreed in January to extend the EFF by one year, with five disbursements of $17.5m (three of them to be granted in 1999) and a sixth of $14m planned over the remaining 18 months of the program. The IMF and the Moldovan authorities will begin discussions in late April on a new ESAF program, which provides for more concessional terms, in order to replace the EFF program and perhaps provide additional IMF support.



At the same time, considerable amounts of foreign exchange will be needed for *servicing* of foreign debt - repayment of principal and interest for the previously received loans. But this very aspect has been already analyzed at the beginning of this chapter.

NBM's foreign exchange reserves

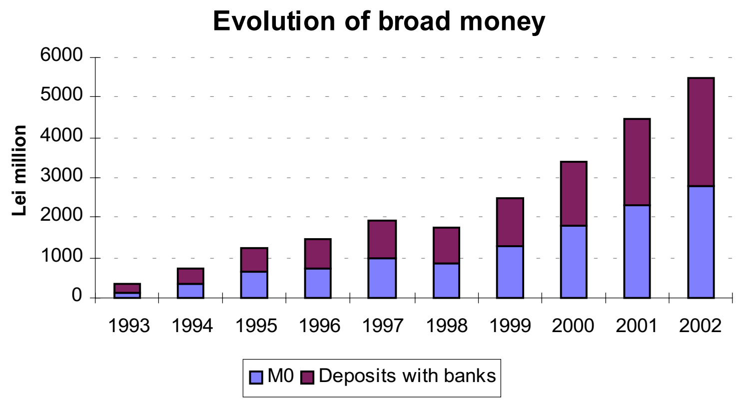
As it was mentioned already, one of the main priorities of the NBM under the new circumstances will be building-up foreign exchange reserves. In this context, the situation in 1999 will remain complicated, because in spite of new tranches from IMF, which in this optimistic scenario will account for about $87.5m, NBM has to pay back to IMF about $70m, plus some other external obligations. During 1999 NBM could also complete its reserves by about $60m purchasing foreign currency in the market. In the next years the situation will be better, because on one hand the reserves will increase by about $20-30m per year out of IMF funds, and on the other hand - by $120-150m per year out of direct conversions of foreign exchange received by the government (privatization revenues, foreign loans), as well as out of purchases of foreign exchange in the interbank market.



Thus, the scenario shows that by end-1999 NBM's total foreign exchange reserves will increase to $200m, covering 2.15 months of imports of goods and services (comparing to 1.42 months in 1998). In 2000 gross reserves will reach the level of 1996 ($314m), and in 2001 they will surpass the $400m mark. By end-2002 the reserves will reach $460m (an increase by 3.2 times comparing to 1998), covering 4.23 months of imports of goods and services. The structure of reserves will also improve - at end-2002 net reserves could exceed $200m, making up 45% of gross reserves, comparing to the figure of 36% at end-1997.

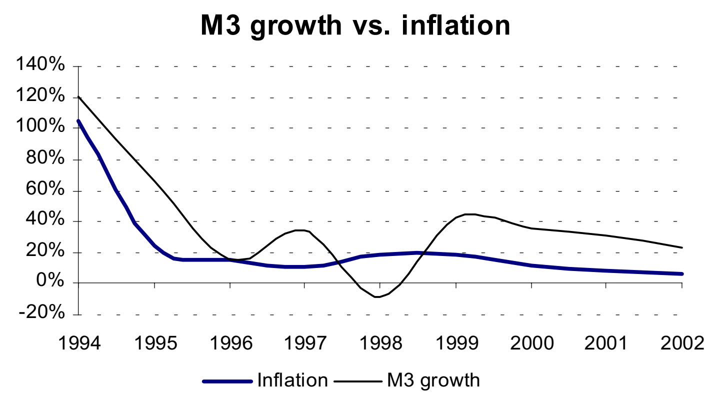
Monetary aggregates

The volume of *lei in circulation* (M_0) will gradually increase in order to satisfy the needs of the economy in cash. Also, if NBM buys hard currency in the market, then an equivalent amount in lei is introduced in circulation, therefore along with the increase of the NBM's foreign exchange reserves, the volume of M_0 will also grow, presumably reaching 2.8bn lei by end-2002 (a 3.3 times growth comparing to 1998). Base money grows at similar pace, while reserve requirement of commercial banks will gradually come down again to 8% from existing 15% (because the excess of reserves represent inert financial resources, which are not channeled in the form of banks' credit investments).



Broad money M_3 is equal to cash in circulation plus deposits (sight, time, and foreign currency deposits) with banking system. By end-2002 broad money could reach according to the scenario 5.5bn lei, i.e. will exceed by 3.1 times the level of 1998. Velocity of M_3 will reduce from 5.0 in 1998 to 2.9 in 2002 reflecting the increase in monetization of national economy from 20% to 35%.

Money multiplier, i.e. the ratio of broad money to reserve money, will gradually increase from 1.66 in 1998 to 1.79 in 2002, reflecting growth of confidence of population and economic agents in banking system. The security in banking sector will be increasing, the role of commercial banks as depository institutions will grow, and respectively the volume of credit investments in country's economy will expand.

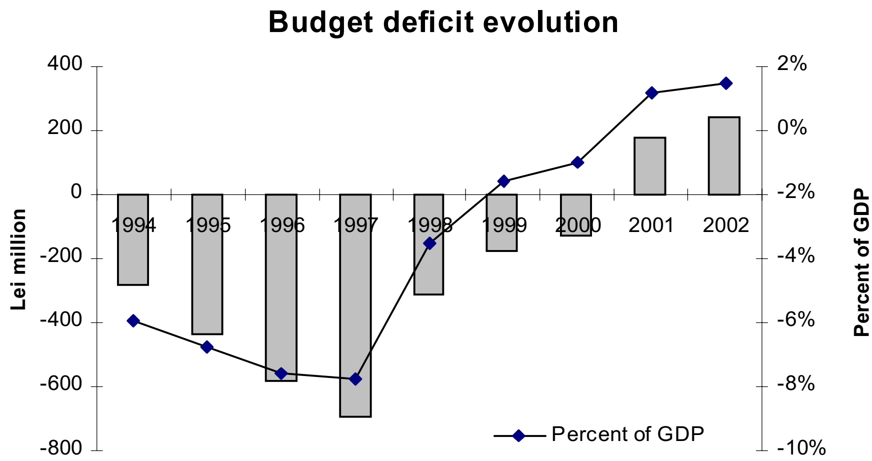


Looking into the structure of deposits, it should be noted that the dollarization ratio (share of foreign exchange deposits in total) grew from 20% in 1997 to 44% in 1998 influenced by events which followed the Russian crisis. In 1999 dollarization ratio will reach according to the scenario 55%, the population preferring (in a devaluation environment) to hold foreign currency deposits. However, along with the stabilization of the national currency and of the macroeconomic environment in general, during the next period the dollarization of deposits will start to decrease gradually, reaching 42% in 2002.

State budget

Under the optimistic scenario of development of economy assumptions were made that the legal environment is created along with respective stimulants for the development of private sector, of entrepreneurial initiative, free competition, prices are set up according to the supply and demand. All these will finally result in a diminishing of the role of state in national economy. Most services for population would be provided by private sector, and share of public financial flows will continuously decrease.

Forecast of the sectors' development of the economy, GDP forecast, evolution of inflation, integration of national economy into the international economic relations at a wider scale, allow us to forecast a relative stable evolution of budgetary system.



Along with optimization and rationalization of public infrastructure, the reform of the fiscal system will be implemented on basis of the Concept of Fiscal Reform in the Republic of Moldova.

As a result of the implemented actions, the budget deficit will continuously reduce to about 160 million lei in 2000, reaching 1% of GDP, comparing to 7.8% in 1997. Already starting with year 2001 the country will have a budget surplus of 1.2-1.5%.

Optimistic scenario foresees, under conditions of consistent and adequate reforms, a reduction of tensions in financial sector, especially in budget sector, after year 2000.

Among key moments to be realized, the following ones can be emphasized:

- reduction of shadow economy and corruption in national economy;
- fiscal reform and complex implementation of Fiscal Code;
- reduction of general fiscal burden through elimination of fiscal exemptions for some branches of the economy, and of individual exemptions; elimination of financial blockages of the economic entities' activities;
- restructuring and privatization of energy sector, the main sector which generates pressure on the budget;
- implementation of social protection and medical system reforms;
- optimization of state's infrastructure;
- ensuring the transparency of public purchases.

Diminishing budget revenue and expenditure as a percentage of GDP reflect the typical situation of a transition economy: (i) fiscal burden on economic agents and individuals should be decreasing for the purpose of stimulating a further economic growth; (ii) reduction of the role of state in economy through applying a function of supervision of compliance with legal framework, and a limited function of redistribution of national assets.

2.3. Inertial - pessimistic scenario

As it was stressed out also in the scenarios elaborated within the Strategy for Development, a very important role has the continuation of normal relations of collaboration between Moldova and international financial organizations, which are also country's main creditors.

If the Government of Moldova continues to ignore IMF & WB recommendations regarding structural reforms in real sector, they could seriously restrict their financial support. This step could mean for Moldova an acceleration of economic instability and extreme political pressures.

It could be a repetition of Bulgarian case, but with a more harmful impact on Moldova, whose economic resources are far less than those of Bulgaria. Thus, it is very important to avoid the pessimistic scenario, because the price that the country will have to pay (or its population which will have to bear it) could be much too high.

The main idea of this scenario is the continuation of depression in Russia, which has an adverse influence on the situation in Moldova. Also, there is an inability of the government to put in place the next economic reforms, or insufficiency of efforts to implement them. As a result, all macroeconomic indicators are worsening, and the country looses another several valuable years of its development.

The crisis could occur already in 1999, in the forth quarter, when it may become obvious that it is not possible to service the foreign debt because of scarcity of hard currency. That is why, we forecast in this scenario that 1999 becomes the year when the Government announces a default of the country, i.e. the incapacity to service the foreign debt, freezing all country's payment obligations.

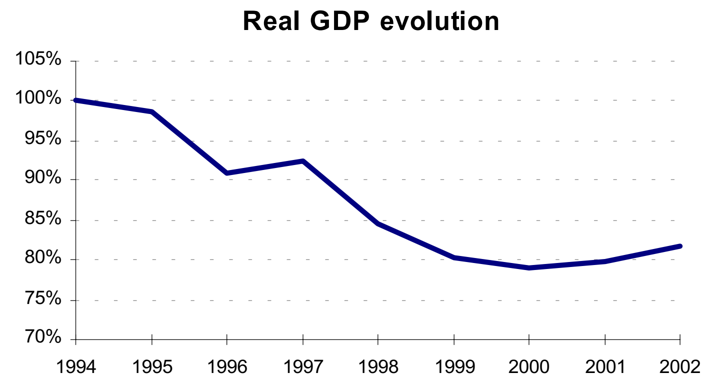
A "Bulgarian case" happens, but with "Moldovan specifics". On one hand, financial assistance programs of the IMF and World Bank are stopped due to the non-compliance by the Government with the concluded agreements, and, on the other hand, it becomes impossible to get new borrowing from private capital markets abroad because of the downgraded country's credit rating. Negotiations with international financial organizations follow, and finally the latter would grant the needed assistance, but they will certainly impose severe conditions for implementation of the proposed reforms.

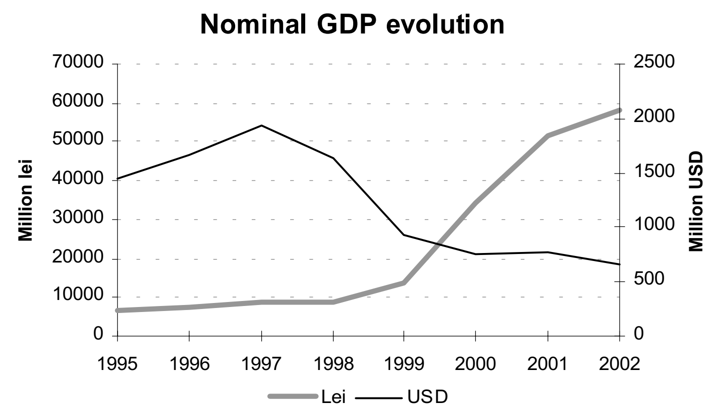
In the end the population suffers most – social indicators worsen, arrears on salaries and pensions reach critical values, unemployment rises, the level of life falls dramatically and the people become poorer.

Main macroeconomic indicators

Global Domestic Product

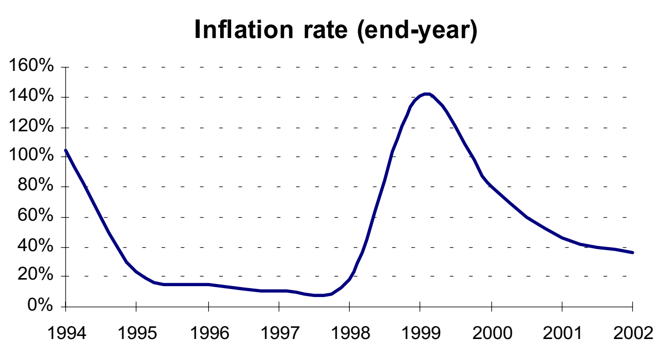
After the slump in 1998, the decline in country's economy continues – according to the scenario real GDP falls in 1999 by another 5%, and in 2000 - by 1.5% more. Obviously, such an evolution of the economy, accompanied by a sharp diminishing of population's standard of living, can not last. After year 2000 a slow economic recovery process starts in the country, expressed by 1% of annual real GDP growth in 2001, and 2.5% in 2002. GDP per capita will reach only $148 in 2002, comparing to $314 in the optimistic scenario.





Inflation

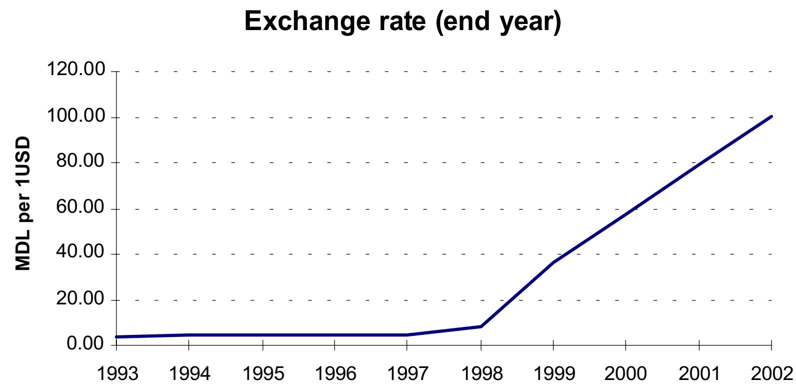
As it was already mentioned, the country will undergo an acute scarcity of financial resources, which will inevitably lead to new issuance of money in circulation (for Government crediting, imposed on the NBM), i.e. to an increase of inflation rate. In fact it is clear that the prices would go up very much also because of the depreciation of the national currency. By end-1999, crisis year, the inflation could reach, according to the scenario, about 140%. In the following years after restoring collaboration with IMF and World Bank we foresee a tendency of gradual reduction in inflation rate to 36% by end-2002. This would express the success of the Central Bank in implementing the tight monetary policy supported by the IMF.



Exchange rate

One of the negative aspects of the crisis here is massive depreciation of the national currency, accompanied by panic and capital flight.

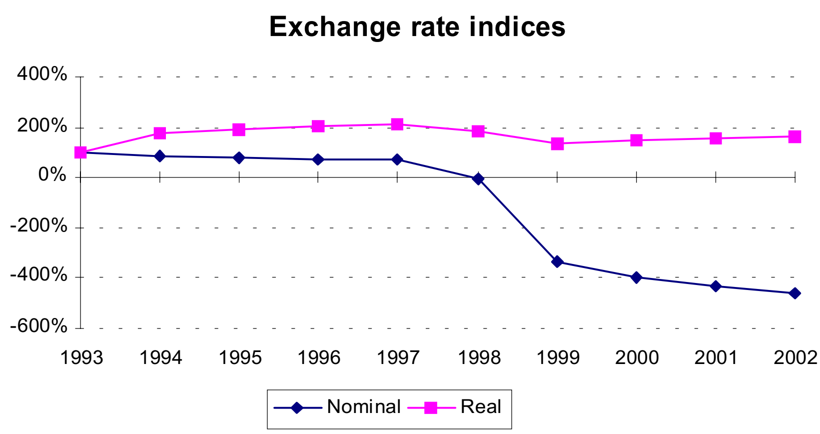
According to this scenario, in October 1999 the leu massively depreciates by 50% in nominal terms against the US dollar. The monthly evolution of the exchange rate cab be seen in the table below.



Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99	Jul-99	Aug-99	Sep-99	Oct-99	Nov-99	Dec-99
100%	102%	101%	103%	105%	107%	109%	111%	113%	150%	140%	120%
8.57	8.74	8.81	9.07	9.53	10.19	11.11	12.33	13.94	20.90	29.26	35.12

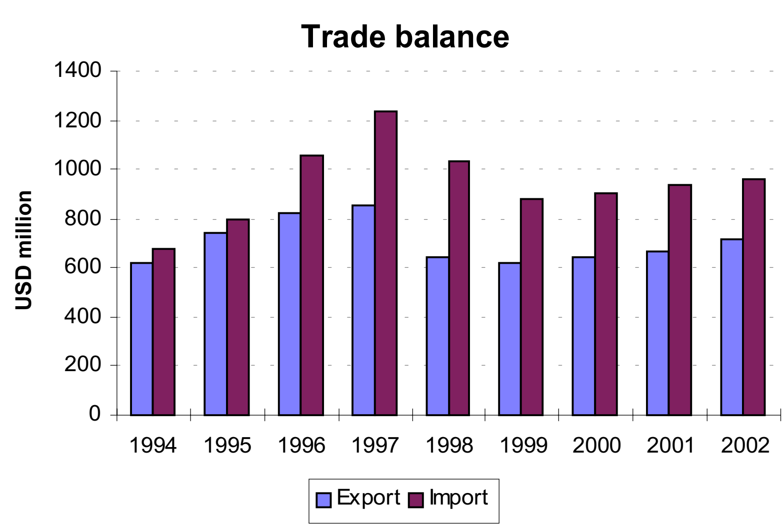
As a result, the end-year exchange rate goes to 36 lei/1USD, which represents a nominal depreciation by 77% in dollar terms. This exchange rate evolution will lead to increase in prices, so that in real terms the leu could depreciate at end-1999 by 44% against the US dollar.

In the next year a depreciation in real terms is no longer possible, because of the tendency of price leveling, especially after the sharp reduction in local prices during 1998-1999 in USD terms. In 2000 the scenario shows already an appreciation in real terms of leu against the dollar – by 12.5%, the exchange rate showing a relative stabilization. In 2001-2002 the real appreciation will be within 6-7%. Thus, by end-2002 the nominal end-year rate could be about 100 lei per 1USD.



Trade balance

Due to the complicated situation on the macro and micro level, lack of foreign direct investments and of business confidence, it is clear that country’s export potential will be diminished. In 1999 we forecast under this scenario a decline in *exports* with another 3%, after the 25% reduction in 1998. And in the next years, although export growth rates will be positive, they are still quite modest comparing to the evolutions in the optimistic scenario.



Also, we foresee a decline in *imports* - by about 15% in 1999, after the 16.6% reduction in 1998. Again, the cause is in lack of resources for imports financing. Starting with year 2000 we forecast an increase in imports caused by the flow of FDI (though a modest one) which bring import of technology, equipment, etc.

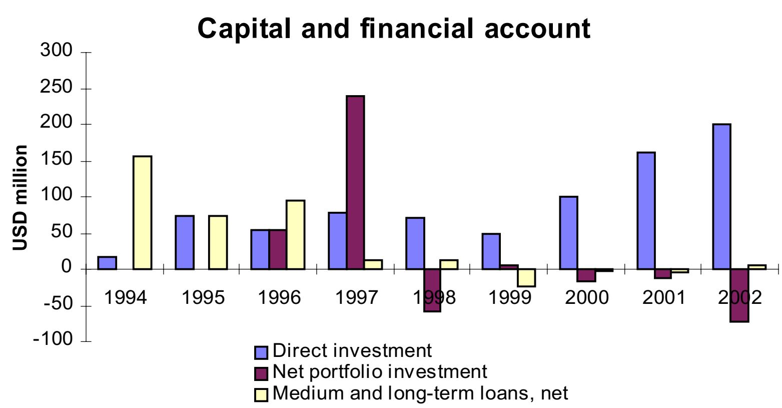
Current account of balance of payments

Current account deficit will gradually diminish, though at a slower pace than in optimistic scenario, decreasing by year 2002 by 3 times comparing to 1997. As a share of GDP current account deficit would show a reduction from 18% towards 12%. The factors which could contribute to such an evolution are similar to those outlined in the optimistic scenario.

Financial and capital account

Foreign direct investment

Due to the crisis in the economy, according to the scenario, foreign direct investments will shrink by about 2 times. Privatization of Moldtelecom in 1999 does not take place because of the unstable economic environment, and it is included only in 2000. Respectively it was extended (for 2001-2002) the privatization of energy sector as well. Thus, by end-2002 the stock of FDI could reach $800m.

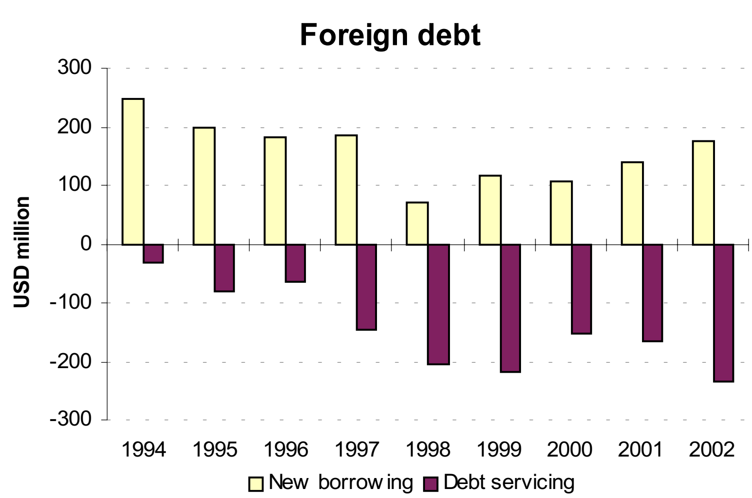


Portfolio investment

There is neither any Eurobond issuance nor massive participation of foreign investors in buying T-Bills. However, the main problem here will be the relations with Russia regarding the debt to equity swaps of Gazprom. According to the scenario, due to the lack of funds servicing of Moldova's energy debt will be temporary frozen in 1999.

Medium and long-term loans

As it was mentioned also in the scenarios elaborated for the Strategy for Development, at this point the country will have to face extremely difficult problems. Because of delays and inconsistency in implementing structural reforms advised by international financial institutions, unwillingness of some local decision makers to implement those reforms, as well as non-compliance of country's governing bodies with the memorandum agreed with the World Bank and IMF, the latter reduce drastically the programs of assistance to Moldova.

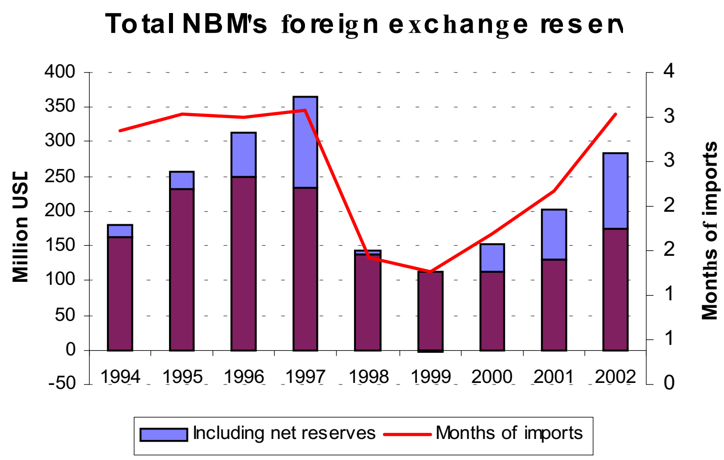


This considerably aggravates the situation on macro level, because it is obvious that without the financial support from international financial institutions granted on quite favorable terms, Moldovan economy will not be able to survive.

So, the new borrowing from international financial institutions (IMF, WB, EBRD and others) are reduced. But at the same time, Moldova has to repay the principal and interest for foreign loans which in 1999 will demand about $220m, and then about $150-160m per year in 2000-2001. Where these funds will be taken from? In 1999 we should point at the reduction of NBM's hard currency reserves by another $32m, but that's evidently not sufficient. A solution here would be foreign debt rescheduling and restructuring if this can be done, but if not, then (like it was in 1998) some debt will not be serviced at all because the country can not finance these expenditures. This accumulation arrears and debt rescheduling is clearly seen in the annexed balance of payments table.

NBM's foreign exchange reserves

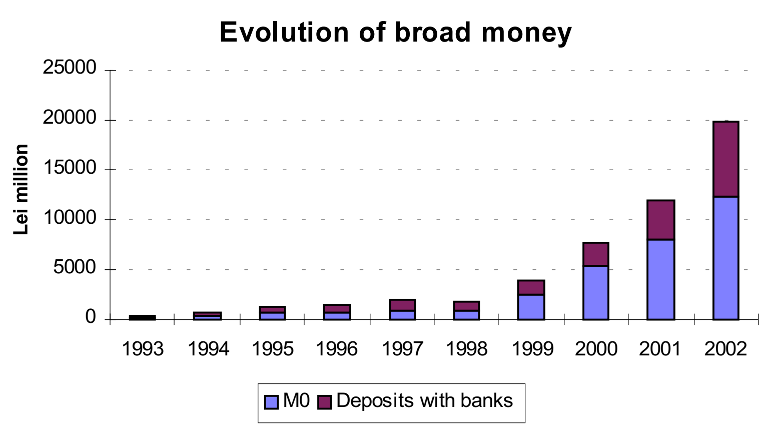
A dramatic aspect of this scenario is the substantial reduction of foreign exchange reserves of the central bank, which will have to: help the Government in servicing its external debt, to cover the BOP overall balance deficit (about $100m in 1999), and finally - to service the IMF debt ($70m in 1999). That is why, in 1999 gross NBM's reserves could reduce further (after the dramatic reduction by $222m in previous year) reaching $112m at end of the year. In the next years as hard currency comes into the country (investments, credits) NBM starts to gradually build up its reserves, by $40-50m per year in 2000-2001. Thus, by end-2002 gross reserves could reach only $285m (covering 3 months of imports of goods and services), which is below the figure for 1996 and 1.6 times less comparing to the evolution in the optimistic scenario. At the same time, net reserves are growing from practically zero in the end of 1998 and 1999 up to $111m in 2002.



Monetary aggregates

Taking into account the evolution of NBM's gross reserves, it is clear that the sustainability of the monetary policy in this scenario is questionable.

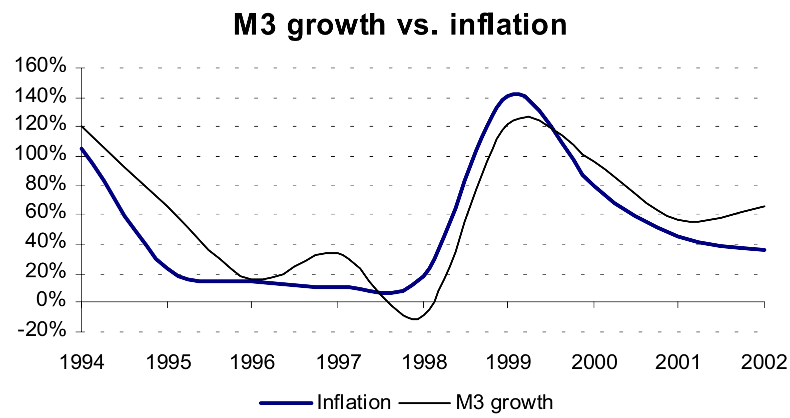
The amount of *lei in circulation* is under pressure, caused by massive depreciation of the national currency, increasing by 3 times during 1999. In the next period high rates of growth of this aggregate are maintained due to the inflationary environment. Also, M_0 aggregate rises



along with the increase in NBM's hard currency reserves. By end-2002 M_0 comes close to 12bn lei (a growth by 14 times comparing to 1998).

Broad money has similar evolution. According to the scenario, by end-2002 the M_3 aggregate could reach according to the scenario about 20bn lei, exceeding by 12 times the level of 1998. Velocity of M_3 will diminish from 5.0 in 1998 to 2.9 in 2002, reflecting respectively an increase in national economy monetization from 20% to 34%.

Money multiplier will be decreasing from 1.66 in 1998 to 1.31 in 1999-2000 showing a considerable reduction of the share of bank deposits in broad money (respectively from 51% to 33%), although in absolute figures they are growing (even if we assume that 30% of the term deposits in lei and 50% of the deposits in foreign currency are withdrawn from the banking system in 1999, year of crisis). This is explained by the effects of national currency depreciation (the bigger is lei equivalent of dollar funds). Looking at the dollarization ratio of deposits we see that it is growing considerably from 44% in 1998 up to 75% in 2002.

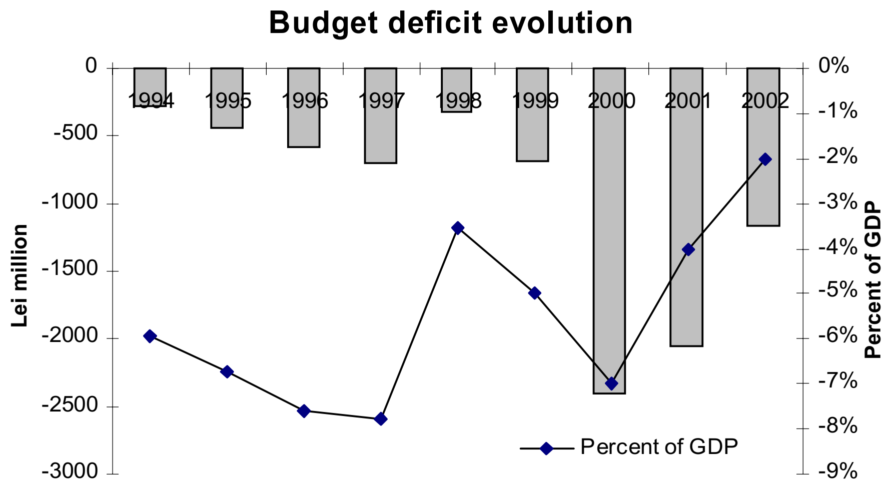


This reflects a more reserved attitude of population towards the banks. Scenario clearly shows that under the given circumstances the population has no more confidence in the devalued leu and prefers to convert available funds in US dollars. People avoiding placing the money on bank accounts, also because of the non-attractive interest rate on deposits - a typical phenomenon in an inflationary environment. And since households deposits (and deposits of legal entities) are a vital input for banks, it becomes clear that in such conditions only strongest banks will survive. Small banks will either go bankrupt or merge with others and as a result few larger banks will remain in the system.

State budget

This scenario describes the situation when the control will be lost on the level of budget deficit under conditions when there would be no measures of acceleration of structural reforms, the process of privatization and liberalization of national economy would be stopped, as well as there would be groundless severe economic protectionism measures undertaken. Moreover, implementation of non-tight monetary and fiscal policies, continuous reduction of real GDP, will generate an aggravation of the situation of state debt (debt rollover can be out of control). Default becomes a reality.

Under such circumstances, the budget and fiscal system would be at a limit of total crisis, budget expenditures being enormous, non-covered by sufficient financial resources. External funds will be more and more difficult to get, because of restrictions set by international financial institutions and low credit rating of the Republic of Moldova on international financial markets.



Consolidated budget deficit will expand, reaching in 1999 5% of GDP, and in 2000 - 7% of GDP.

In conditions of massive depreciation of national currency in 1999 will considerably increase the lei equivalent of the USD funds needed for repaying the interest for external loans granted to the country. Also, it should be stressed out, that because of the big reduction of new borrowing, the deficit financing out of external sources is sharply deteriorating.

Evolution of budget income and expenditures during 1999-2005 is forecasted taking into account the following assumptions:

- structural reforms will be stopped, old social infrastructure being maintained, old central and local public administration, and reform of force structures will not be implemented;
- taking into account the above stated, the main accent was put on the evolution of inflation, i.e. both public income and expenditures will greatly depend on evolution of prices;
- funds for financing budget deficit will be quite expensive, due to the increase of interest rate.

Under such circumstances, tensions on budget are inevitable, therefore determining the change in social infrastructure, and consequently slow structural reforms starting year 2002. However, it should be mentioned, that the situation in budget-fiscal sector could be even more difficult taking into account the insignificant forecasted economic growth, as well as other structural factors.

3. MACROECONOMIC MODELING

3.1. Flow of Funds model

Description of the Flow of Funds tables

Flow of Funds table is a new analysis tool for Moldova, which presents the information from the four main macroeconomic accounts and four sectors in a single table. Macroeconomic aggregates are traditionally derived from an interconnected network of macroeconomic accounts: the national income and product accounts, balance of payments, government finance statistics, and monetary accounts. The four main macroeconomic sectors (private, government, foreign, and banking) engage in economic and expenditure transactions. Flow of Funds table gives a quick overview of the entire economy, shows how the sectorial deficits are financed, and serves as a tool for examining the accuracy and consistency of macroeconomic data and forecasts. Its purpose is threefold: to show the relationship between domestic economy and balance of payments, to explore the links among sectors of economy, and to develop a tool for analyzing these interrelations in a systematic way.

There are several reasons for compiling and publishing information on macroeconomic accounts and, in turn, of Flow of Funds tables:

- To monitor the behavior of the economy;
- To analyze the causal mechanisms that are working in the economy;
- To support economic policy and decision-making;
- To provide a framework for international comparison.

Sectors' non-financial transactions generate changes in financial assets and liabilities. These changes are, in turn, recorded as the sectors' financial transactions. Thus, for each sector, the real or non-financial transactions (such as imports and exports) and the financial transactions (such as borrowing from abroad or drawings from country's international reserves) embrace the sector's entire economic relations with other sectors.

Flows of funds tables are presented in annexes. The first column, national accounts, shows the aggregate transactions for all economic sectors. The next four columns show a breakdown of the economy into the four sectors: the private sector, the government, the banking system, and the rest of the world. The sum of every column must be zero, because total outflows must equal total inflows of real and financial resources. The rows of the Flow of Funds table record transactions between the sectors. Each row adds up to zero because every inflow of money to one sector must be matched by an outflow of money from another sector.

The flow of funds table is divided into two panels by the row containing the saving/ investment balance of each sector. The top panel records real transactions in goods, services, income, and foreign transfers. The bottom panel records financial transactions that change the assets or liabilities position of the sectors.

Summing the items in the top panel of the table in each column gives us the surplus/ deficit of income over expenditures or saving/investment balance of that sector. The balances are shown in the middle of the table. Non-financial balance for general government sector operations reflects budget deficit (on commitment base), state enterprises balance, and escalation of energy and other state arrears. Summing the balances of all sectors horizontally should give zero as the results, reflecting the equality between the saving/investment balances and the current account, according to the formula:

(Sg-Ig) + (Sp-Ip) = CAB

The bottom panel of the table shows transactions in financial assets and liabilities. It provides information on the financing of the saving/investment balances. This panel is divided into two sections: foreign and domestic financing.

Foreign financing section rows contain flows of the direct investment and foreign borrowing, growth of the energy and other state arrears as well as change in net foreign assets. Foreign borrowing row reflects loan disbursements minus amortization of foreign debt and repatriated capital. Most of the information in this row comes from the balance of payments, though it should be supplemented by more detailed information from the government statistics. Last row of this section reflects the changes in bank's net foreign assets (National Bank and commercial banks) resulting from transactions with the rest of the world.

Domestic financing section shows the funds the private sector and government borrowed from the banks during the year, which is equivalent to the increase in the stock in the bank credit. The change in money stock (broad money) reflects an increase in private sector's financial assets in the form of bank deposits and currency holdings. The counterpart of this is an increase in the broad money, which is an asset for banks. The main equation, used in the banking system column, is:

Net Foreign Assets + Net Domestic Assets = Broad Money.

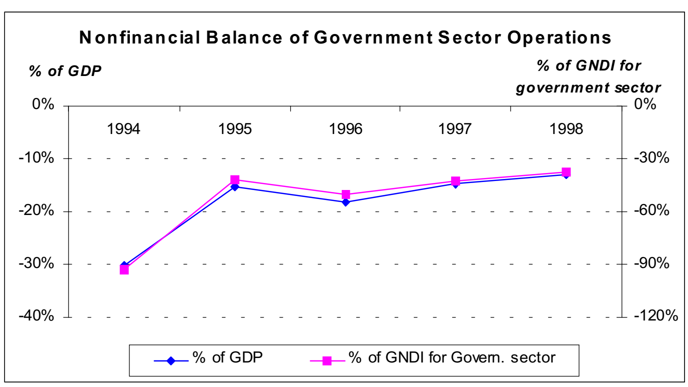
Non-bank borrowing shows private sector landing to the government, which increases financial assets of the private sector and rises the government's debt by the same amount. In the government statistics this is usually shown as non-bank borrowing.

Thus, the elaboration and implementation of Flow of Funds tables, which describe the undergoing macroeconomic processes in a concise form, is necessary for a deeper analysis and for an effective forecast of certain economic development scenarios. The use of tables, combining the main economic accounts with all their links, enriches the theory and practice of economic analysis and forecasting.

Flow of Funds tables for 1994-1998 analysis

This is the first time in Moldova when the Flow of Funds tables, presented in the annexes, are used in the practice of economic analysis. Here, for the purpose of convergence to international standards and IMF standards for instance, the balance of payments, national and fiscal account tables were modified. Monetary survey tables were recalculated to year average conditions in order to compare them with other main macroeconomic accounts, then annual change in the monetary aggregates were calculated.

Flow of Funds tables served the purpose of analyzing the financial activities of the governmental and of the private sector in Moldova. The crisis which hit Moldova in 1998 was partially triggered by the Government's inefficient management in the earlier years. Between 1994 and 1998 the government sector used to spend much more funds than it actually disposed. This excess

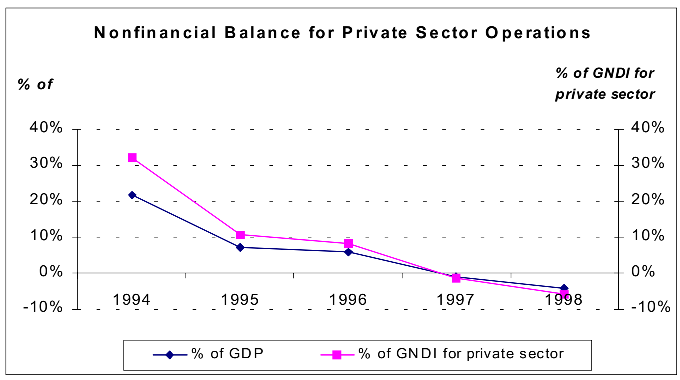


constituted 30 percent of GDP in 1994, or over 90 percent of it's own (governmental) disposable income (GNDIg). In the following years the borrowing gradually decreased, but still constituted significant amounts. In 1998 they accounted for 13 percent of GDP, or 37% of GNDIg.

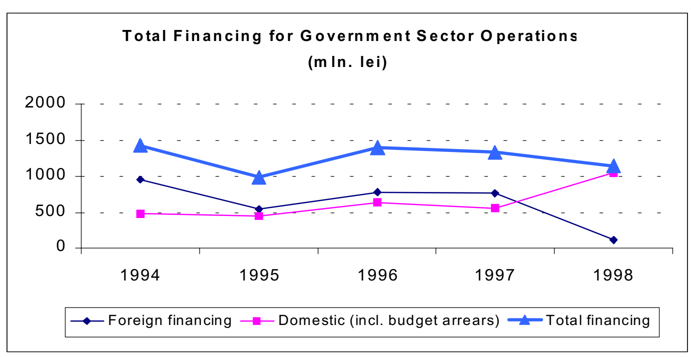
The delays in implementation of the structural reforms in the recent years led to an excessive level of government borrowing (approximately 40-50 percent of GNDIg each year). There is a huge debt burden accumulated by the year 1999, resulting from the government's policy of unlimited borrowing. The country faces a real threat of default, which may be avoided only through the restructuring of the foreign debt.

A totally different picture exists in the private sector. In 1994 the voucher privatization program was launched. Until 1997 the private sector of Moldova (generally speaking) was in the stage of formation: mass privatization was going on, legal framework for the functioning of market economy was in the stage of creation. At the same time, the largest part of the economy remained under state ownership, contributing to large financial flows from other sectors, including the private one.

Between 1994 and 1996 the private sector was unable to accumulate for full utilization the disposable income created in this sector, the unclaimed part of which, was finally redistributed in the governmental sector. In 1994 the utilization of income created in this sector was below 70 percent of the own (private) disposable income (GNDIp), constituting 22 percent of GDP. The following 2 years private sector was seceding the utilization of GNDIp, and in 1997 it started borrowing from other sectors. In 1998 borrowing amounted to 6 percent of GNDIp.

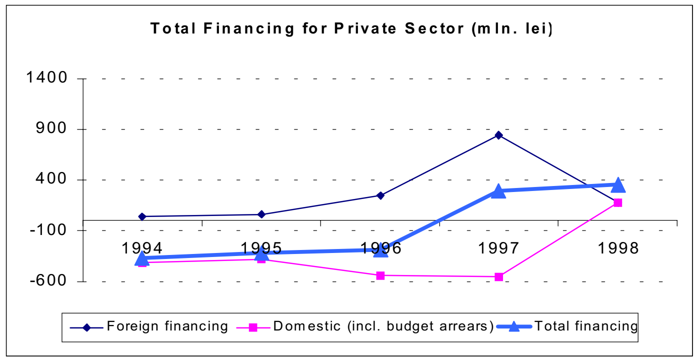


The lack of structural reforms in the budgetary sphere contributed to maintenance of a high level of state borrowing. If in 1994 these internal loans constituted 1.4 billion lei, in 1997 they diminished only by 0.1 billion lei. The financing of the Fiscal Account deficit, that included the increased budget debt, arrears on energy resources utilization, and state enterprises balances, was realized from both external and internal sources. The level of foreign financing in 1994-97 actually exceeded the internal one.

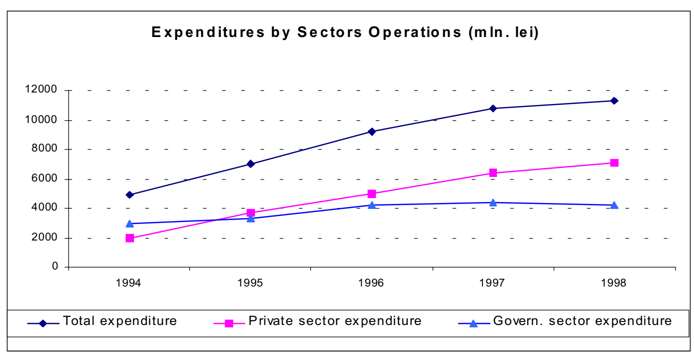


The dramatic cuts in external financing in 1998 conditioned the boost in arrears for pensions and state employees' salaries. Along with the difficulties related to the coverage of the budget deficit, state borrowing remained at a high level (over 1.1 billion lei.) Internal borrowing compensated external financing cuts. The possibilities of relatively easy borrowing of resources did not stimulate intensification of structural reforms and permitted the government to delay their implementation.

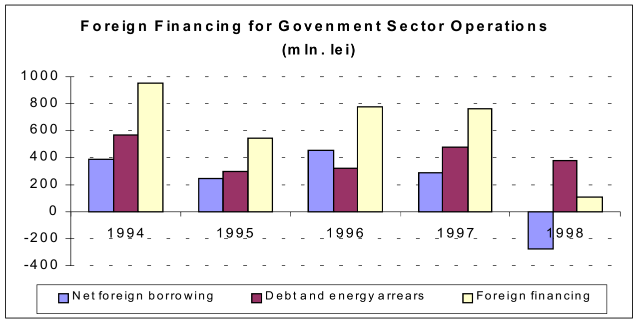
Between 1994 and 1997 private sector of the economy was supplying with its own resources the needs of the government sector (400-500 million lei each year). External financing of the private sector grew from 40 million lei in 1994 to 840 million lei in 1997. The confidence of foreign investors in Moldovan private sector was growing year after year, until the country encountered the financial crisis in 1998. The reaction of investors was quite understandable, and financing of the private sector plummeted to 180 million lei. The satisfaction of sector's needs in 1998 was partially compensated by the accumulation of internal resources. This was the first year when the private sector did not credit the governmental sector from its own resources, but started borrowing on the internal capital market.



The dynamics of demand of the government sector (consumption and investment) slowed down in the last three years. In 1994 this demand constituted approximately three billion lei, in 1996-98 it amounted to 4.3 billion lei, being virtually unchanged. Simultaneously, the demand of the private sector was characterized by an impetuous dynamic: from two billion lei in 1994 to 7.1 billion lei in 1998. Limitation of resources determined the sharpening of contradictions between the high level of government needs and the dramatic increase of demand in the private sector. The press of the government sector resulted in an increase of the shadow component both within that sector and within the private sector.

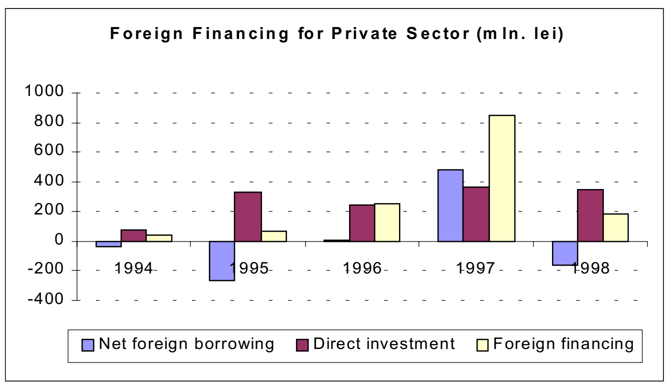


The 1999-year is a turning point for the solution of deepened contradictions between the sectors. Two solutions to this problem exist. The first and the most acceptable for the democratic development of the society, within a market-type economy, is to adjust state spending to revenues, to restructure the foreign debt, to implement an efficient management system for the state debt. The second, least acceptable, that leaves the society far behind in the process of democratization and market-oriented reforms – mandatory seizure of funds from the private sector for the fulfillment of state needs.



Quite interesting is the structure of external borrowing by the state sector of economy. Most foreign loans are acquired by the energetic sector. In 1994 the foreign debt of that particular sector increased by some 570 million lei, the following two years the yearly increase shrunk to approximately 300 million lei. Lack of structural reforms in the energy sector led to the situation, when the state is unable to pay for energy resources imports. Thus, in 1997 their share in the foreign debt increased by some 480 million lei. In 1998 the increase in debts flattened down, but not as a result of implementation of sound structural reforms, - as a result of cuts in the amounts delivered by the suppliers, due to Moldova's insolvency.

The flow of foreign funds into the state sector of the economy was mainly determined by the aid from international organizations, directed towards the implementation of the structural reform in Moldova. By 1998 the pace of reforms slowed down significantly, the Government and the Parliament did not fulfill their obligations to international organizations, the external inflows being thus stop. It was the first time when the amount to be paid as principal and interest for external debt exceeded the amounts flowing in. The foreign financing in 1998 accounted for only 100 million lei, as compared to 800 million lei in 1997.



The external financing of the private sector of the economy is done through loans and through direct investment. The most beneficiary form of foreign financing for the private sector is considered to be foreign direct investment, which is determined by the corresponding investment climate in the country. The dynamic of foreign direct investments shows that Moldova's unattractiveness to foreign investors (in 1998 the total amount of foreign direct investment constituted 80 US dollars per capita.) Acceleration of implementation of structural reforms will allow encouraging of investors' interest in Moldova. Financial inflows for private sector crediting are very volatile. Possibilities of so called "hot money" to rapidly leave the country introduce a destabilizing element both in the development of the private sector and in the functioning of the banking industry.

In spite of the rapid development of the private sector, a large share of the created product is being utilized by the state sector of the economy. In 1995 the state sector used 50 percent of GDP, in 1998 – 47 percent. As a result of implemented structural reforms this share should decrease to 30-40 percent, with a simultaneous relaxation of the pressure imposed by the state sector on the economy, the conditions of functioning of the private sector will improve, and new stimulus for investments inflows in Moldova will emerge.

Flow of Funds equilibrium model and financial program development

A financial program is a comprehensive set of policy measures designed to achieve a given set of macroeconomic goals. These goals could simply be to maintain a given level of economic performance. More often, however, the policies are designed to eliminate disequilibrium between aggregate demand and supply, which typically manifests itself in balance of payment problems, high inflation rates, and low or falling output.

Financial programs emphasize the importance of monetary, fiscal, and exchange rate policies in controlling domestic demand and correcting balance of payments disequilibria. However, financial programs also incorporate the effects of other policy measures, most prominently those aimed at increasing aggregate supply. Such measures should help minimize the losses in output and employment during the adjustment period, while eventually leading to a balance of payments position that is sustainable.

Financial programs are typically designed to restore balance of payments viability, and more generally to restore macroeconomic stability. Financial programs based on view that macroeconomic stability is a necessary condition for economic growth.

Sustainability of the balance of payments may be assessed with reference to the evolution of the current account over the medium term. While circumstances may vary from one country to another, in general terms a sustainable external current account position may be defined as one that can be financed on a lasting basis with adequate inflows. Current account balance, at the same time, is consistent with adequate growth, price stability, and the country’s ability to service fully its external debt servicing obligations.

A financial program clearly needs to be set in a forward looking time framework. The medium-term scenarios are generally considered in a time horizon of about five years. Typically financial programs for forthcoming year are worked out in considerable detail because of the more imminent need to formulate a comprehensive package of policy measures. Forecasts of the more distant years are less detailed, often focusing on the broad implications for external adjustment, and are by their nature less certain.

An integrated system of macroeconomic accounts, covering national accounts, the balance of payments, and the fiscal and monetary accounts provides the information needed to assess the performance of the economy and the need for policy adjustment (within financial program maintenance). The accounts also provide a framework for policy analysis and indicate key consistency checks. These accounting relationships highlight the fact that any sector’s spending beyond its income must be financed by the savings of other sectors, and that such excess spending by an entire economy is possible only when financed from external sources.

The accounting framework must be complemented by the specifications of a set of behavioral relationship. These relations indicate the typical response of some of the variables included in the accounting framework to changes in other variables. The behavioral relationships together with the accounting identities form a schematic quantitative representation, or “model”, of the relevant economic processes.

The behavioral relationships together with accounting framework, and Flow of Funds tables considered as an aggregate is named the Flow of Funds equilibrium model. This model can be used to assess the changes in policy variables, i.e., variables that are under the authorities’ control, needed to achieve given policy objectives.

Flow of Funds equilibrium model consists of 7 sectors, which comprise exogenous variables:

Sectors	Exogenous variables
1. Assumptions and policy variables	Real growth rate of GDP; Annual inflation rate (end period); Annual inflation rate (average period); Exchange rate (end period).
2. External debt servicing	Government debt service payments (principal); Government debt service payments (interest); Government new credit receiving; National Bank debt service payments (principal); National Bank debt service payments (interest); National Bank new credit receiving; Private debt service payments (principal); Private debt service payments (interest); Private new credit receiving.
3. Balance of payments	***Current account*** Exports of goods; Net income; Net remittances; Net current transfers. ***Capital and Financial Account*** Direct investment; Portfolio investment; Foreign currency purchases by National Bank; Increase in energy and other arrears by Government.
4. National accounts	Gross fixed investment (percent of GDP); Government sector investment (percent of GDP); Change in stocks (non-government).
5. Fiscal account	General government revenue (percent of GDP); Govern. consumption share in non-interest expenditure; Interest payments for domestic borrowing; Net lending; State enterprises balance; Overall cash basis balance (percent of GDP); Increase in expenditure arrears; Net domestic borrowing from commercial banks; Net domestic borrowing from non-banking sector; Privatization income (in USD); Privatization income (in MDL).
6. Monetary survey	Net foreign assets for commercial banks; Claims on public enterprises from National Bank; Other items, net; Broad money; Currency in circulation; Sight deposits; Time deposits; Residents' foreign-currency deposits.
7. Flow of Funds table	--------

Flow of Funds Equilibrium Model stipulates a range of limitations for the control of adopted assumptions of the financial program. The utilization of limitations in the program is determined by the need for a diversified coordination of the final version of the program, resulted after a certain number of iterations. The following are the major limitations of the model:

- International reserves in months of the goods and service imports;
- Export/GDP;
- Domestic debt stock/Budget expend;
- International reserves/Broad money;
- Velocity (GDP/Broad money).

Design and implementation of the financial program envisage carrying out number of the steps:

Step 1. Identify the economic problems;

Step 2. Set objectives and measures for it achieved, determine policy package and the impact of measures;

Step 3. Forecast the economic date, using flow of funds equilibrium model, which envisages relationships between macroeconomic accounts;

Step 4. Iterate projections to achieve economic and accounting consistency.

Flow of Funds tables for 1999-2002 projection

In the process of elaboration of the Financial Program for the period until 2002 the following major economic problems of the country were exposed:

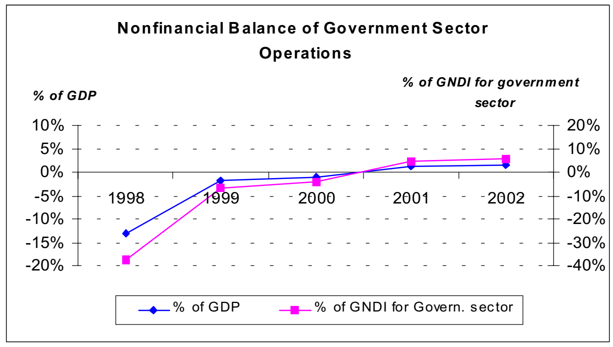
- Consumption in the government sector significantly exceeds disposable income of the sector, which leads to an increase in the external and internal debt. By 1999 state debt reached a critical value, the amount necessary for its service disrupts the economic security of the country. The energy sector accounts for a significant portion of the debt that requires urgent restructuring.
- The real sector of the economy is in stagnation, investment in this sector reached an extremely low level, and the share of informal economy is high. The Russian financial crisis triggered a dramatic fall in Moldovan exports, deepening the problems of the real sector.
- The low level of foreign exchange reserves does not allow to promote a tight policy with regard to the national currency, the threat of currency devaluation is persistent, which, in the conditions of an open country, will result in high inflation rates.

The implementation of the Financial Program pursues the following major objectives of the macroeconomic policy:

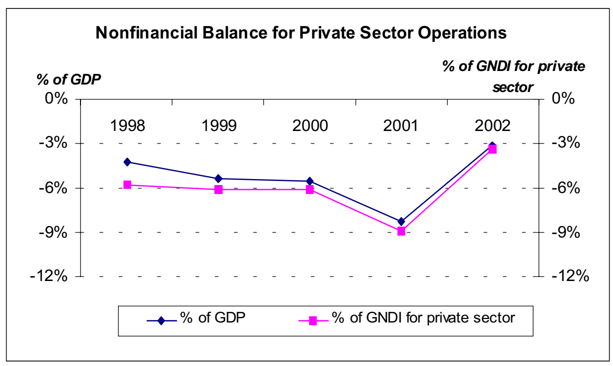
- To adjust spending to revenues in the governmental sector, and to attain by the end of the period a budget surplus of 1.5 percent of GDP.
- Attain a 3.3 percent yearly growth rate of GDP by the end of Program period.
- Reduce inflation to 6 percent per year by the end of Program period.
- Increase international reserves to 3.5-4 months of the goods and service imports.

In order to achieve the objectives raised by the Program a range of measures should be undertaken, including the acceleration of structural reforms in the areas related to budgetary spending (pension system reform, education, health care, and so on), transition to a qualitatively new level of budget management, acceleration of the energy sector and agrarian reform. In order to revive the real sector of the economy it is necessary to ensure the fiscal discipline, to guarantee the private property protection, to eliminate the barriers to merchandise movements towards the global markets, taking into consideration the adherence to WTO and the free trade agreements signed with the EU countries. The measures towards the reanimation of the real sector of the economy will allow attracting flows of foreign investment, mostly into export-oriented industries. In order to ensure the stability of the Moldovan lei one should implement the policy of growth of currency reserves of the country.

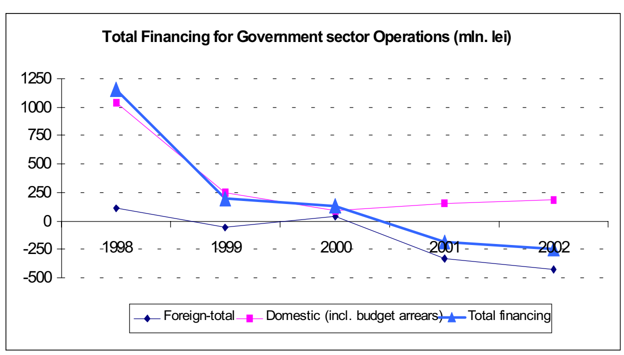
The period being forecasted (1999-2002) is characterized by a shift in the emphasis of lending policy in the governmental sector towards the gradual diminishing of the level of debit obligations. The period 1999-2000 is reserved for the implementation of the structural reform, while the Government will still use financing from the other sectors of the economy (1-1.7 percent of GDP or 3.9-6.5 percent GNDIg). Proceedings from cash privatization (telecommunication and energy sector enterprises) will cushion at the first stages the effects of plummeted loan inflows. In 2001-2002 the absorption (consumption and investment) will be below the GNDIg index, therefore, in the governmental sector will be created conditions for the reimbursement of earlier received loans. These years the amount to be repaid will constitute 1.2-1.5 percent of GDP or 4.7-5.9 percent of GNDIg.



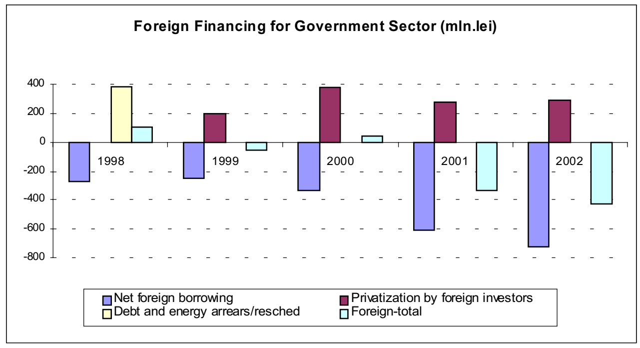
In 1999-2002 the financing of the private sector of the economy at the expense of other sectors will continue. The dynamics of financing will evolve from 5.1 to 9.8 percent of GDP or from 5.8 to 11.3 percent of GNDIp. The positive dynamics of these indicators is determined by the amelioration of the investment climate in the country, based on the implementation of structural reforms, on the increase of the share of the private sector, on the consolidation of investor's confidence in it and in the country overall. The realization of cash privatization program will also boost investor's interest in financing the private sector projects.



During the considered period the level of financing of the government sector from local resources will be within 150-250 million lei. The inflows of foreign financing in 1999-2000 will be virtually zero, but in the following years it will be directed out of the governmental sector and will constitute 330-430 million lei. The tendency of the general financing of the governmental sector will shift during the program period from +200 million lei in 1999 to -250 million lei in 2002.

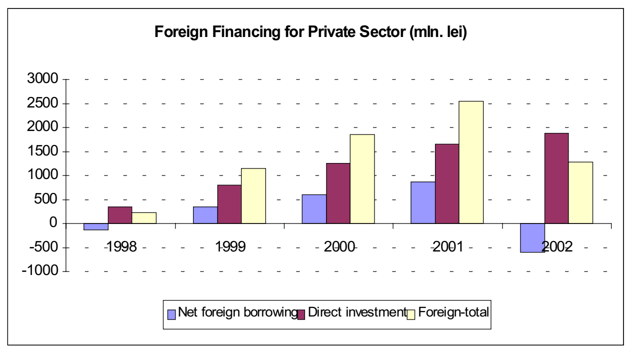


The main inflows of foreign financing of the governmental sector during the program period include net foreign borrowing and privatization income by foreign investors. According to the program of cash privatization and individual privatization plans, the main articles of revenues will be the proceedings from energy sector and telecommunication privatization. The average forecasted yearly revenues from privatization by foreign investors are 300 million lei.

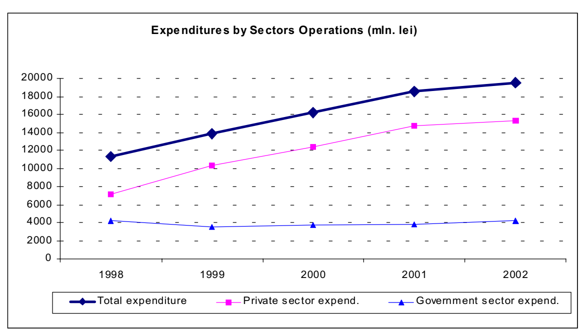


Net foreign borrowing is calculated as the difference between drawings (new credits inflows) and amortization of the last credits received. As a result of the restructuring of the foreign debt and of the policy of limitation of foreign borrowing on the one hand, and of economy of budget resources in order to lower the overall level of foreign debt on the other hand, net foreign borrowing will increase from -250 million lei in 1999 to -720 million lei in 2002. For a longer-term forecast one should mention a dramatic drop in that index to -400...-500 million lei.

The foreign direct investment will play an increasing role in the structure of private sector financing. During the forecasted period FDI will increase from 800 million lei in 1999 to 1900 million lei in 2002. The volume of net foreign borrowing will increase from 350 to 880 million lei in the period ending in 2001. The boost in the amount of private sector financing (from 1150 million lei in the beginning of the program period, to 2500 million lei at the end) will allow surpassing the negative tendencies in the development of the real economy, will increase the export potential of the country and will create thousands working places.



The increased role of the private sector of the economy is reflected in the amounts of sectors spending. If during the program period government sector expenditure will increase from 3500 only to 4200 million lei, private sector expenditure will boost from 10400 to 15300 million lei. Thus, the share of private sector expenditure in overall expenditure of the country will increase from 63 to 78 percent. By the end of program period the private sector will play a major role in the economic development of Moldova.



At the end of program period the imports of goods and services will be covered by international reserves of up to 4 month. Domestic debt stock will not exceed 15 – 17 percent of consolidate general government budget expenditures. By 2002 the level of state debt will constitute 93 percent of GDP, in a longer-run time frame (2005) this indicator will decrease to 70 percent. Thus, during the program period conditions for the effective functioning of Moldovan economy will be created, both in the governmental and in the private sector.

3.2. Modeling the budget revenues

The model developed by IEAG-CASE is designated to enhance the tax forecasting capabilities of the Government and is expected to facilitate the Government in designing its budget policy. It is based on a set of econometric equations that reflect the influence of the real economy developments on the revenues from tax collection.

This model has common goals with the project "Medium Term Financial Planning" (MTFP) implemented by GTZ – German Technical Assistance Agency – in Moldova. Further cooperation will allow for an adjustment and modernization of the model taking into account aspects of medium term financial planning.

Fiscal policy in Moldova

It is well established that transition countries that implemented tight fiscal policy resumed the growth sooner and it was both more stable and higher in comparison to countries with large and unsustainable budget deficits and associated high levels of government spending. Macroeconomic developments in Moldova in last years exhibit striking contrast between consequent tight monetary policy and loose, arguably unsustainable fiscal policy. While the inflation and monetary aggregates show low dynamics, not achieved yet even by the most advanced transition economies, budget deficit share in GDP exhibited almost double digit values. The most apparent result of such policy was rapid accumulation of foreign debt. It may be argued that the reduction of state budget deficit is the most important condition for medium-term stabilization and growth of Moldovan economy.

Three factors drive fiscal policy of Moldovan government. The first one is the general recession that reduces the tax base. Second factor is the inability of fiscal administration to collect taxes, which is a result of the widespread tax evasion and corruption. Third factor is the absence of the proper adjustment on the expenditure side. This inertia of expenditure commitments derives from the absence of a political group that would gather the public support for explicit constraint of social expenditures. Unsustainable fiscal imbalances are therefore a result of the myopia of Moldovan policy-makers and common substituting the realistic forecasts with wishful thinking. As long as the practice of unjustifiable raising of revenue side in the budget process is continued and realistic forecasts are neglected, the chances for sustainable and efficient fiscal policy are low.

The consequences of unrealistic forecasts

As creditors are reluctant to finance unexpected increase in government imbalances, additional borrowings prove to be costly, which adds up to already heavy burden of debt service. However, as the experience shows, the lower than expected revenues are only partly reflected in the increased cash deficit. Instead, the budget is forced to withhold its due expenditures. The expenditure adjustment that should have taken place in the budgeting process is therefore postponed to the later date and hence one may argue that the problem of unrealistic forecasts is minor. There is, however, a big difference between planned reduction in expenditure commitments and ad hoc withholding of budget expenses.

When revenue plans are not realized the government is prone to accumulate expenditure arrears. We do not wish to name here negative consequences of arrears, by now they seem to be obvious to everybody in Moldova. It also seems politically impossible to increase the stock of arrears even further in 1999. In response to lower than expected revenues, the government is also likely to introduce across the board cuts in expenditures. This solution although favorable in shorter term only aggravates the fundamental problem of Moldovan public finance: the absence of prioritization of budget expenses. Ad hoc cuts are usually made according to the political sensitiveness of expenditures, therefore the allocation of scarce public resources is increasingly based upon the relative strength of groups of interests and extrapolation of existing spending patterns. Distribution of expenditures based on economic or equity considerations would only be possible if the government starts to realistically assess its spending capabilities in the budgeting process. The failure to gather anticipated revenues and make foreseen expenses pushes also the government towards involvement in dubious non-cash operations that both decrease the efficiency of the government and distort economic life in Moldova.

Models vs. intuition and experience

There are several reasons to model both the expenditure and revenue side of the budget. The first and foremost reason is that the model provides relatively objective assessment of the fiscal policy capabilities. Consequently, it provides information on the need for policy adjustment. Secondly, it allows for more transparent formulation of the policy targets and instruments necessary to achieve these targets. Thirdly, it helps to underline links between various economic factors that are not apparent otherwise. The budget revenue models are therefore widely used not only by national fiscal authorities, but also by international lenders when assessing the viability of planned fiscal policy.

The forecasting process can be viewed as the spectrum of approaches, with purely mathematical methods at one extreme and purely subjective method on the other. Mathematical models are based on the quantitative analysis and yield the results that are independent of political interests and subjective opinions. True, mathematical models can not incorporate all intuition and experience of the staff in the Ministry of Finance. Forecasts based exclusively on the subjective views are however difficult to defend, sensitive to political pressures, and may be wrong in the first place. Moldovan experience shows that forecasts of Ministry of Finance tend not to acknowledge the real macroeconomic performance, not to account for low level of tax compliance and to not fully reflect the impact of exemptions on effective tax rate. Mathematical models are relatively prove to such errors, and are not readily influenced by the political pressures. Also the model guarantees some time consistency of forecasts even under higher turnover of Ministry of Finance employees due to the changing cabinets or any other reasons.

The development of model

The simplest mathematical method of tax revenue projections is the extrapolation of the recent trends in the collections (for example the real term changes, changing share in GDP etc.). As such, forecasts do not reflect the extent of the changes of tax base and their impact on the tax collection. The identification of links from the changes in tax base to the changes in the collection is therefore the necessary condition for precise forecasting.

To be interesting for policymakers the forecasts have to be based on the behavioral relationships in the economy. It means that the forecasted revenues are not derived on potential and legal relationships between tax base and tax collection but rather on the real life response of collection to various changes in economic environment. The model represents the typical economic processes in the revenue collection process. Ideally, the model also reflects the possible results of changes of variables that are under the control of authorities on the revenue target. As the dependent variable is the actual collection of taxes, the model by definition accounts for effects of tax evasion, tax exemptions on the collection of revenues.

The model of fiscal revenues presented by IEAG-CASE is based on the set of external assumptions related to the macroeconomic developments of Moldova that are exogenous to the model: the model does not attempt to forecast GDP growth or its composition. Consequently, there is no feedback from tax collection to the development of real economy or prices. Such partial equilibrium approach may be justified by requirements of:

- tractability of the model necessary for its role as a practical tool for policymakers
- focus on short-term forecasts (1-2 year time horizon)

- institutional arrangements – in Moldova, as in most countries, revenue forecasting is the role of Ministry of Finance that imports the macroeconomic forecasts from other government institutions (Ministry of Economy)
- weak statistical base - correct GDP modeling requires the accurate information on the components of GDP and such information on Moldova is unavailable

Major tax categories are forecasted. The breakdown of tax revenues was done in order to find a balance between the need to separate revenues with different legal regulations and the preference for forecasting broad tax categories with more stable and substantial contributions. Proxies for tax base for each category are provided. Theoretically, these should correspond to the legal tax base of the given tax. However, as broad categories of taxes are considered and they cover important parts of overall economic activity, it is chosen to use national account and balance of payment items as proxies for the tax base. As such, the model does not require very detailed information on entities that are subject to taxation. For the scarcity of such data, this feature is the additional advantage of the model.

Limitations of the model

The incidence of structural reforms, policy shifts and exogenous shocks lead to reduced credibility of established behavioral relationships. There is also the problem of the timing of the impact of changes on the predicted tax collections. In many cases the sole expectations of some policy shifts may lead to changes in the process of collection generation. The most recent example of this sort relates to the surge in the registered import-export transactions in the last days of December 1998 in the eve of the change of VAT principle in the trade with Russia and Belarus

The analysis of Moldova does not reveal, however, the strong influence of fiscal regulation on tax collection. The best known example is the collection of excise taxes, in which the growth in tax rates did not lead to any increase in revenues. Moreover, many of the changes in the tax regime had rather implicit and therefore difficult to quantify character. The obvious example is the changing willingness of authorities to grant tax exceptions and amnesties. On the other hand, revenues collected through the non-cash transactions make the interpretation of the results less straightforward.

The good results of econometric interference depend crucially on the data quality and number of observations available. Both factors reduce the reliability of results as applied to Moldova. Especially the available data on the national accounts is of doubtful quality. Also analyzed time series that exhibited smooth development during the period of time 1994-1997 were subject to sharp movements in the second half of 1998. Therefore, some of structural relationships discovered in the data are not likely to pertain afterwards.

Monthly vs. Quarterly Model

The monthly-date model provides the number of observation that is sufficient for econometric interference. Results of estimations are therefore statistically satisfactory and relatively reliable. However, they are rather unsatisfactory from the economic point of view, as the specification is not well underpinned by the economic theory or the economic intuition. Especially the overwhelming role of exports in the tax revenue generation process is difficult to explain.

Introduction of some additional variables, which are reported by the statistical authorities only on quarterly basis, eliminates the problem. Specifically, these are activities in trade, banking sector, transport and other services that directly determine the tax collection in Moldova. The role of agriculture and industry production is relatively limited. Moreover, performance of services (that are reported in national accounts as “other activities’’) is highly correlated to the exports what provides the link between tax revenues and exports observed in the monthly model.

Model - description

The model uses the following variables:

A) Dependent Variables:

• Direct taxes: • revenues from the individual income tax, • revenues from the corporate income (profit) tax. • Indirect taxes: • revenues from the VAT, • revenues from the excise tax. • Revenues from taxes in external trade.	Current prices (millions of lei)

B) Independent Variables:

- industrial production - millions of lei (current prices),
- agricultural production - millions of lei (1996 fixed prices),
- services - millions of lei (1996 fixed prices),
- exports - millions of U.S. dollars,
- imports - millions of U.S. dollars,
- inflation rate

The data sample contains observations within the period Jan 1994 –Nov 1998 (59 observations) for the monthly version and within Q1 1995 – QIII 1998 (15 observations) in case of the quarterly variant.

In the first case, all variables are deflated by CPI, except exports, which are expressed in millions of USD. In the quarterly model, all variables are expressed in nominal terms.

Monthly Model

- **Individual Income Tax**
  D(INCOME) = 0.0008992666994*D(AGR) + 0.05995747123*D(EXPORT) + [AR(1)=-0.9148058246,MA(2)=-0.9373553056]
- **Corporate Profit Tax**
  LOG(PROFIT) = -0.6942937522*(@SEAS(1)) + [AR(2)=0.4688312431,AR(8)=0.4420520819,MA(10)=-0.8579624606]
- **VAT**
  VAT = 0.223284945*EXPORT + 23.37758161*(@SEAS(12)) + 5.220349538*(@SEAS(11)) + 0.006337445932*AGR + [AR(1)=0.6967946855]
- **Excise Tax**
  DLOG(EXCISE) = 1.250384736*DLOG(EXPORT) - 0.4937379516*DLOG(EXPORT(-2)) + 0.5164273359*DLOG(EXPORT(-3)) + [AR(1)=-0.5833835263]
- **Custom tariffs**
  LOG(DUTY) = -3.628219568 - 0.6552793022*LOG(IND(-1)) + 1.02085932*LOG(EXPORT) + 0.7227923193*LOG(EXPORT(-1)) + 1.566221996*D1098 + [MA(1)=0.6126282198]

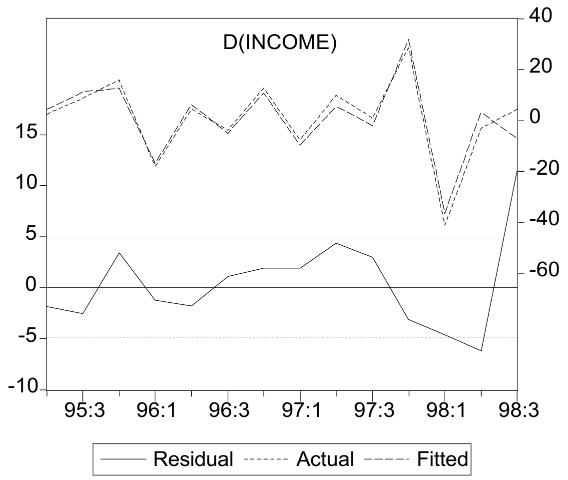
Quarterly Model

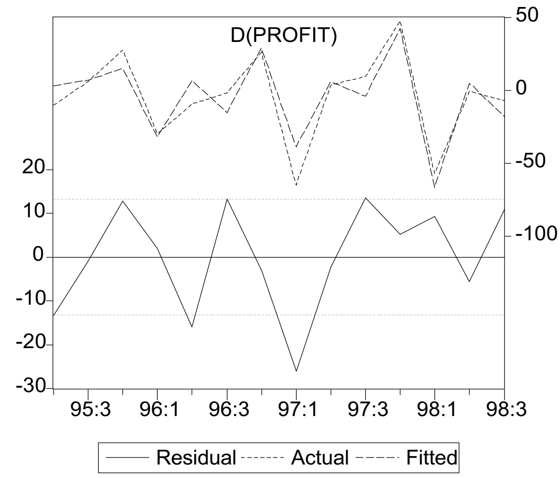
- **Individual Income Tax**
  D(INCOME) = -0.0274444192*D(IND) + 0.03530133467*D(OTHER) + 0.02665206462*D(EXPORT)
- **Corporate Profit Tax**
  D(PROFIT) = -5.343030683 + 0.05039429115*D(OTHER) + 0.04455338418*D(EXPORT)
- **VAT**
  D(VAT) = 0.04970078945*D(AGR) - 0.2199537333*D(IND) + 0.4046822336*D(OTHER)
- **Excise Tax**
  D(EXCISE) = 0.03967693193*D(OTHER) + 0.01425590946*D(AGR) + 43.16237409*D9702
- **Custom tariffs**
  LOG(DUTY) = -11.76802426 + 2.086096715*LOG(IMPORT) + 0.6311912015*D9702 + [MA(2)=-0.8813467176,BACKCAST=1995:1]

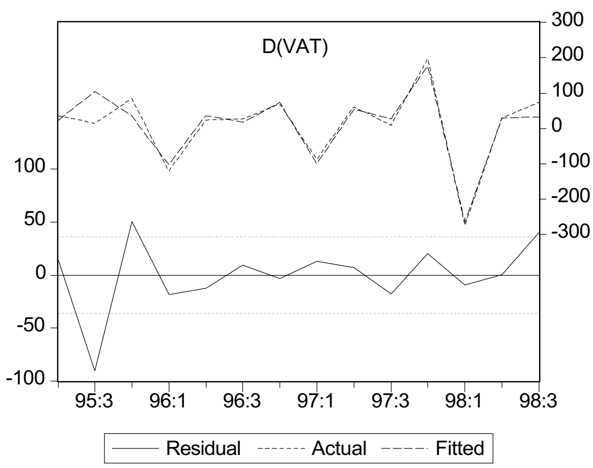
In order to forecast the future revenues, we used the following assumptions

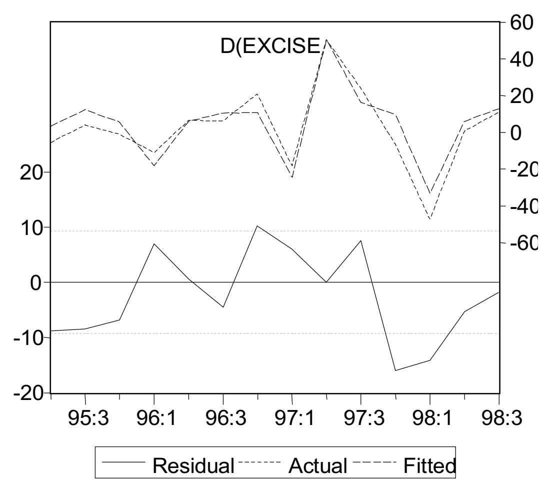
1) rate of growth of real industrial production in 1999
2) rate of growth of real agriculture production in 1999
3) rate of growth of $ exports in 1999
4) inflation rate in 1999

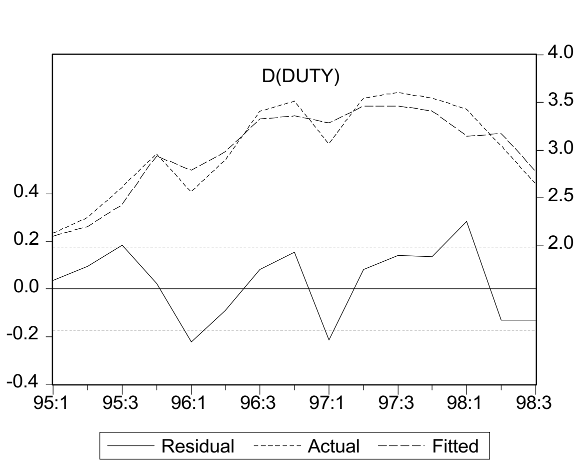
Actual and Fitted Values are presented in the following graphs for the quarterly model











8. Using the above estimations and the corresponding forecasts, we can summarize the results as it follows

Underlying Economic Developments (% change – real terms)

	GDP	Industrial Production	Agricultural Production	Exports	CPI (Dec - Dec)
1999	-6%	-10%	-6%	-15%	15%

Tax revenues – leu millions (current prices)

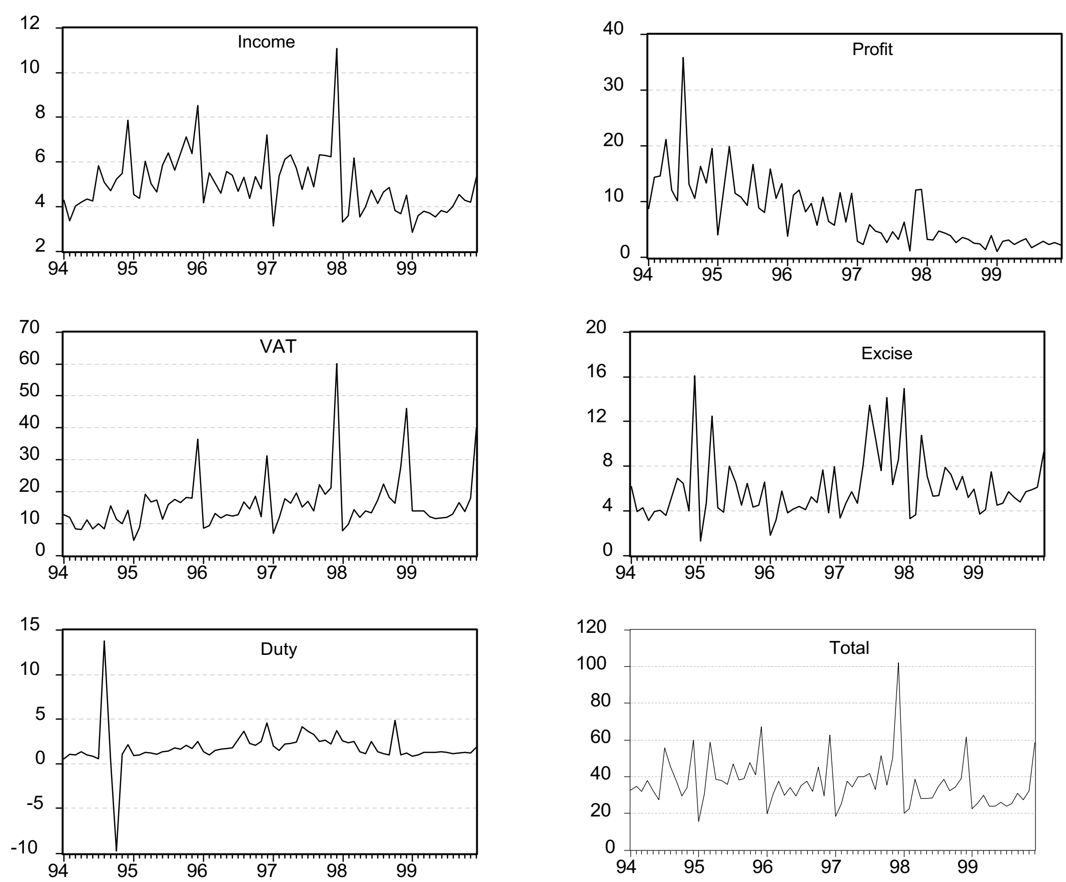
	Income	Profit	VAT	Excise	Duty	***TOTAL***
budget 1997	230	380	800	440	135	***1,985***
1997	282	244	948	401	127	***2,002***
budget 1998	330	330	860	590	120	***2,060***
1998	223	177	1124	374	109	***2,010***
budget 1999	155	240	920	683	95*	***2,093****
CASE forecast 1999	250	155	1,190	355	79	***2,029****

Tax Revenues as share of GDP**

	Income	Profit	VAT	Excise	Duty	***TOTAL***
budget 1997	2.6%	4.3%	9.0%	4.9%	1.5%	**22.3%**
1997	3.2%	2.7%	10.6%	4.5%	1.4%	**22.5%**
budget 1998	3.7%	1.8%	9.8%	6.7%	1.4%	**23.4%**
1998	2.5%	2.0%	12.8%	4.3%	1.2%	**22.8%**
budget 1999	*1.5%*	*2.4%*	*9.1%*	*6.7%*	*0.9%*	***20.7%***
CASE forecast 1999	*2.5%*	*1.5%*	*11.7%*	*3.5%*	*0.8%*	***20.1%***

** excluding the import surcharge tax in 1999 (leu170 million – 1.7% of GDP),*
*** GDP equal to leu 10,150 million (6% decrease in real terms)*
Sources: Ministry of Finance, own calculations

Monthly Tax Revenues – Real Terms – 1994 -1999



3.3. Small open economy: concise macroeconomic model

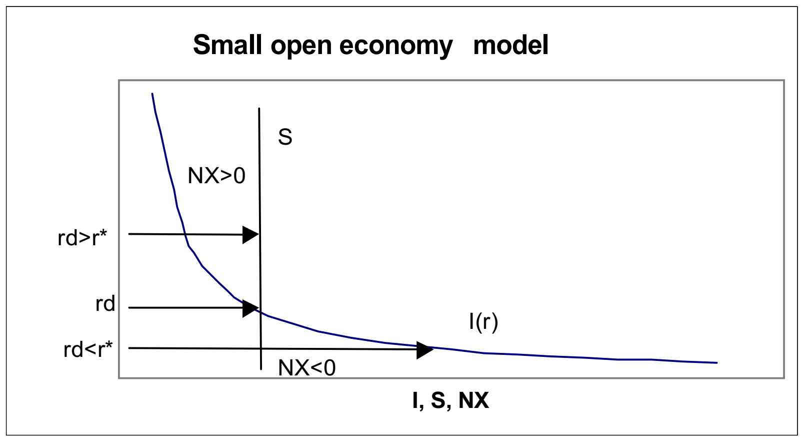
The notion of open economy has several meanings. It can be open for the circulation of goods. In a long run it will result in equalization of internal and world prices. The economy can be open for the circulation of capital. This leads to the equalization of internal and external real interest rates. The economy can also be open for the circulation of labor force, which implies the equalization of the internal and external wages. Finally, it can be open for the flows of information. This will contribute to the acceleration of the first three processes. It is clear that every economy has its own degree of openness of every of the above-mentioned criteria, and the notion of "completely open economy" is just a theoretical extreme case.

The model examined in our case is referring to the first two kinds of "openness" of the economy. The notion of small economy will be specified below.

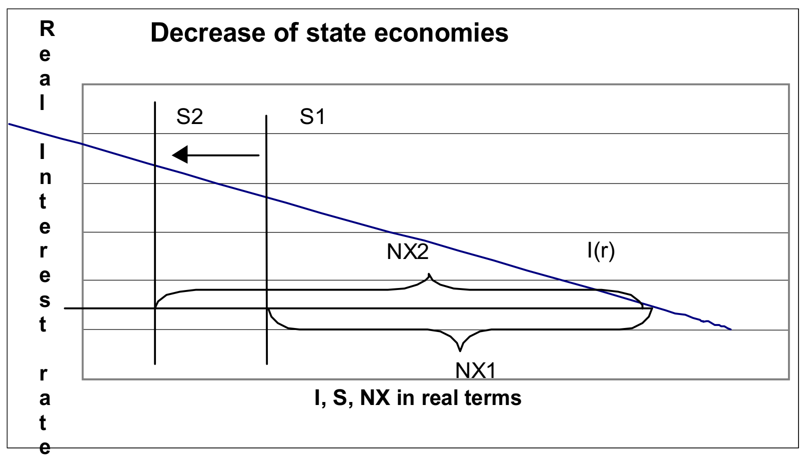
The *basic assumptions for the model of the small open economy are*:

1) GDP is a function of production factors – capital and labor force;
2) Consumption grows to the extend of the growth of income: **C=C(Y); C'>0**;
3) Volume of investments grows to the extend of the decrease of real interest rate **r, I= I(r)**, because growth of the real interest rate means that the supply of sources for investments becomes more expensive **(I'< 0)**;
4) The economy is small – this means that the economy does not influence the world real interest rate. Moreover, in a small open economy the domestic real interest rate tends to the world one through a simple mechanism: if the domestic real interest rate **(rd)** becomes smaller than the world real interest rate **(r*),** this leads to the outflow of capital from the country and rise of domestic interest rate, and conversely: if the domestic real interest rate is bigger than the world one, this causes an inflow of capital in the country and diminishes the domestic interest rate. As a result **rd=r*.**

Small open economy model



Decrease of state economies



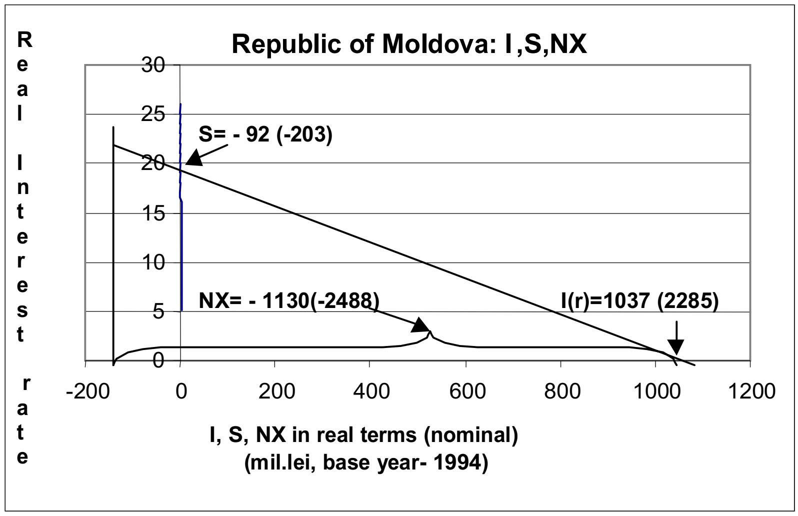
Let's denote total savings by **S**, the net export by **NX**.

It is known that

S – I(r*) = NX. (1) that is to say, if savings are smaller than investments, than the net export is negative.

In the picture the curve of investments is an inverse function of real interest rate - **I(r)**, the curve of savings – **S** (which in a short run does not depend on the interest rate, and therefore is a vertical line), and net export – distance between **S** and **I**, according to the expression (1), are displayed.

Should the economy be closed, then the market would stabilize a real interest rate equilibrating savings and investments – **rd*** at the intersection of **I** and **S**. The fact that the economy is closed, and small, **rd = r*** has an impact on the net export. If the real domestic interest rate (in case of *closed economy* –**rd*)** is higher than the real world interest rate **(rd* > r*),** this implies in an univocal mode, that net export (current account) would be negative **(NX<0)**. And conversely,



if **rd* < r*** (*ceteris paribus assumption*), this implies that **NX** will be positive. That is to say, the slope of the investment curve and the position of the curve of savings determine univocally the sign of net export, and consequently, current account.

Total savings as a share of GDP of the Republic of Moldova diminished from 24% in 1994 to - 2% in 1998. At the same time, the share of gross capital formation diminished slower. This implied the decrease of net exports from –4% in 1994 to –28% in 1998.

Savings, investments and net exports (% of GDP)

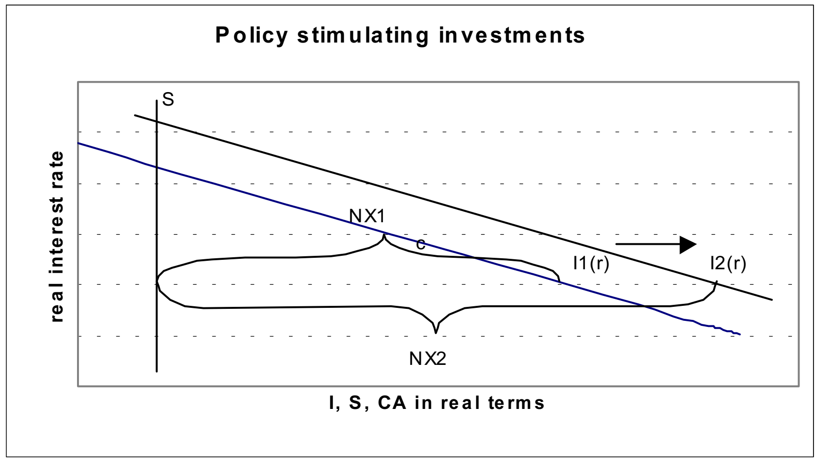
	1994	1995	1996	1997	1998
Total savings	24.57	17.11	4.19	2.52	-2.31
Investments (gross capital formation)	28.83	24.88	24.39	23.67	25.95
Net export	-4.25	-7.76	-20.20	-21.15	-28.26

First calculation on the model of small open economy was accomplished on the base of real data of Moldova. First results (although insufficiently stable, because the calculation needs an utilization of long time series) shows that in the Republic of Moldova investments in real terms depend on the real interest rate in such a way, that any growth of the real interest rate by one percent was accompanied by a decrease of total real investments by 30 million lei, or in nominal terms - by 66 million lei (prices of 1998).

The real interest rate grew continuously during the last four years, which caused an essential decrease of real investments. According to our calculations, the real domestic interest rate **rd*,** which equilibrates the savings and investments in the case when the economy would be closed, exceeds 20%, and it is evidently bigger than the world real interested rate. This fact implies that net export, and, consequently, the current account, will be unconditionally negative. Moreover, savings in real terms move continuously to the left, which imply worsening of**NX**. Evolving under inertia, net exports will diminish even more. Therefore, elaboration of measures aimed at improving the situation is needed. As a way to achieve it could be an attempt to “push” the curve of savings **S** to the right, by promoting a policy stimulating savings (and, correspondingly, bank deposits).

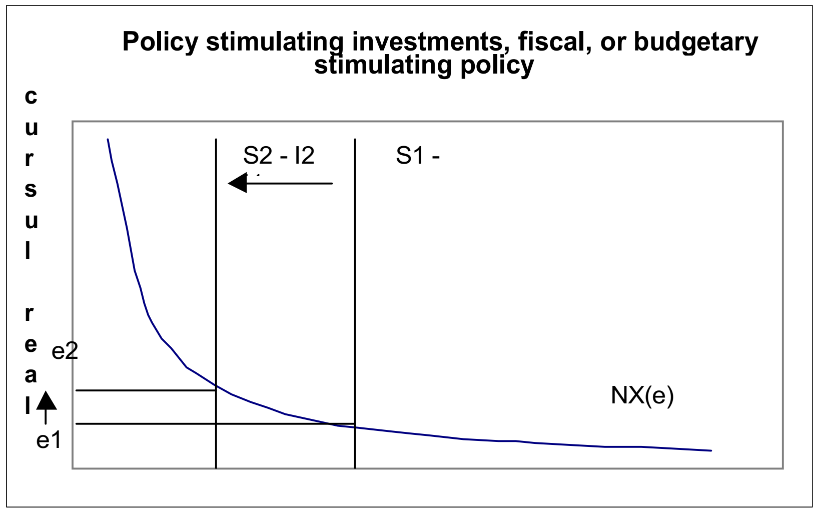
The model of a small open economy shows that the real interest rate is not the only way of affecting net exports. A *stimulating budgetary or fiscal policy* could have a substantial impact. Thus, decrease of the state savings will push the curve of savings **S** to the left; as a result **NX** will diminish from **NX1** to **NX2**. The same will happen in case of diminishing taxes (**T**) - *fiscal stimulating policy*, because **S = (Y – C (Y-T) – G),** where Y is GDP, **C** – consumption, **G** – government expenditures.

Policy stimulating investments causes the shift of the curve of investments outside (from **I1(r)** to **I2(r)**) and thus aggravates the net exports (a change from **NX1<0** to **NX2<0**).



There is another way to influence the net export – through *the real exchange rate* of the national currency (**e**).

In the picture the curve **NX** depends negatively on the real exchange rate (**NX' (e)<0**). The curve **S-I** is vertical because it does not depend of the real exchange rate. Stimulating *budgetary or fiscal policies* will cause a decrease of savings, and shift of the **S-I** curve to the left. This will result in the growth of real exchange rate, and, consequently, diminishing net export.



The *policy stimulating investments* will cause the shift of curve **S-I** to the left and will result in worsening of the situation of current account as well.

Conclusions:

First calculations on the model of small open economy on the base of *de facto* data for the Republic of Moldova displayed an essential sensibility of investments to changes in the real interest rate.

During last years the real interest rate in the Republic of Moldova was continuously growing, which fact essentially disfavored the investment climate in the country.

The domestic "equilibrium" real interest rate in case when the economy should be closed exceeds a lot the world real exchange rates, which implies negative net exports.

Another cause of diminishing net export of Moldova is the real appreciation of national currency.

Real national savings diminish continuously, having negative consequences for current account.

Investments stimulating policy or tax burden reduction, will aggravate situation in current account.

Improvement of the situation demands an intervention of the state by promoting two kinds of policies. *First, savings stimulating policy* could be realized through a set of measures, as follows:

- Introduction of a system of bank deposits insurance;
- Setting up a system of modern banking services, such as utilization of magnetic saving cards, credit cards, direct depositing of wages on banking accounts;
- Abrogation of taxing bank deposit interests from bank deposits provided in the new Fiscal Code.

The *second policy, of real depreciation of national currency*, could be realized through holding back the inflation rate lower than the rate of depreciation of national currency.

4. ANNEXES

4.1. Macroeconomic scenarios for 1999-2002 (tables and charts)

MAIN MACROECONOMIC INDICATORS (optimistic scenario)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Real GDP growth rate	-30.9%	-1.4%	-7.8%	1.6%	-8.6%	-2.5%	1.7%	2.8%	3.3%
Nominal GDP (excl. Transnistria), lei million	4737	6480	7658	8917	8804	10911	12764	14466	15954
Nominal GDP, USD million	1164	1443	1665	1933	1630	1116	1046	1070	1127
GDP per capita, USD	322	400	463	538	454	311	291	298	314
Annual inflation rate (end period)	104.6%	23.8%	15.1%	11.2%	18.3%	19.1%	12.0%	8.3%	6.0%
Average inflation rate	487.0%	30.0%	24.0%	12.0%	7.7%	27.1%	15.0%	10.3%	6.8%
Consolidated general govt. revenues, lei million	1848	2556	2835	3473	3270	3186	3829	4195	4467
Consolidated general govt. expenditures, lei million	2348	2993	3418	4165	3583	3361	3957	4022	4228
Budget balance, lei million	-500	-437	-583	-692	-313	-175	-128	174	239
Budget balance as % of GDP	-10.6%	-6.7%	-7.6%	-7.8%	-3.6%	-1.6%	-1.0%	1.2%	1.5%
Internal debt, million lei	270	477	737	940	1500	1700	1850	1980	2200
Internal debt, USD million	63	106	158	202	180	147	139	138	150
Stock of foreign debt*, USD million	627	765	916	1005	922	957	1028	1078	1044
Stock of foreign debt as % of GDP	53.8%	53.0%	55.0%	52.0%	56.6%	85.7%	98.3%	100.8%	92.7%
New borrowing*, USD million	247	196	181	185	70	228	184	170	170
Debt servicing (principal+interest)*, USD million	32	81	64	147	207	239	158	159	235
NBM gross forex reserves, USD million	180	257	314	366	144	200	314	428	459
NBM rez. In months of imports of GFS	2.85	3.03	3.00	3.07	1.42	2.15	3.23	4.16	4.23
NBM net forex reserves, USD million	17	26	66	131	5	34	116	200	206
Share of net reserves in total	9.5%	10.0%	20.9%	35.8%	3.5%	17.0%	36.9%	46.8%	44.8%
Cash in circulation M0, million lei	345	639	731	972	855	1274	1783	2318	2781
M2, million lei	676	1107	1292	1739	1357	1816	2523	3430	4345
Broad money M3 (at current exchange rate), million lei	749	1244	1439	1929	1756	2493	3382	4451	5504
Money multiplier	1.36	1.59	1.68	1.72	1.66	1.66	1.66	1.72	1.79
Dollarization of deposits	18.2%	22.6%	20.7%	19.8%	44.2%	55.5%	53.6%	47.6%	42.1%
Velocity of M3	6.3	5.2	5.3	4.6	5.0	4.4	3.8	3.3	2.9
Monetization of the economy	15.8%	19.2%	18.8%	21.6%	19.9%	22.8%	26.5%	30.8%	34.5%
End-year exchange rate, lei/1USD	4.27	4.50	4.65	4.66	8.32	11.58	13.32	14.33	14.68
Average exchange rate, lei/1USD	4.07	4.5	4.6	4.6	5.4	9.8	12.2	13.5	14.2
Nominal end-year annual appreciation(+)/depreciation(-), MDL/USD	–17.3%	–5.4%	–3.4%	–0.2%	–78.6%	–39.2%	–15.0%	–7.6%	–2.4%
Nominal end-year annual appreciation(+)/depreciation(-), USD/MDL	–14.8%	–5.1%	–3.2%	–0.2%	–44.0%	–28.1%	–13.0%	–7.0%	–2.4%
Real end-year annual appreciation(+)/depreciation(-)	+74.4%	+17.5%	+11.4%	+10.9%	–33.8%	–14.4%	–2.6%	+0.6%	+3.5%

** Included loans from IMF, WB, EBRD, EU, USA, Russia, other creditors and Eurobond issues*

BALANCE OF PAYMENTS (optimistic scenario)

USD million

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Current account	-97	-115	-209	-309	-300	-129	-111	-109	-103
Current account, as % of GDP	-8.3%	-8.0%	-12.6%	-16.0%	-18.4%	-11.6%	-10.6%	-10.2%	-9.1%
Trade balance	-54	-55	-234	-384	-390	-234	-231	-239	-248
Exports (fob)	618	739	822	851	640	704	764	825	891
Exports, yr/yr	--	119.6%	111.2%	103.5%	75.0%	110.0%	108.5%	108.0%	108.0%
Imports (fob)	672	794	1056	1235	1030	938	995	1064	1139
Import, yr/yr	--	118.2%	133.0%	117.0%	83.4%	91.1%	106.0%	107.0%	107.0%
Services, net	-51	-96	-78	-63	-50	-50	-40	-40	-35
Income, net	-16	-29	-40	-62	-80	-85	-90	-90	-90
incl. interest payments for loans & bonds	-10	-15	-23	-39	-43	-39	-37	-33	-26
Current transfers, net	24	65	143	200	220	240	250	260	270
incl. veniturile celor ce lucr. peste hotare	--	--	80	80	100	100	100	100	100
Capital and finance account	92	70	185	406	25	236	201	200	113
Direct Investment	18	73	53	79	70	150	160	170	190
Foreign direct investments, as % of GDP	1.5%	5.1%	3.2%	4.1%	4.3%	13.4%	15.3%	15.9%	16.9%
Portfolio investment, net	0	0	53	240	-58	71	-7	4	-97
Eurobonds	0	0	30	75	-30	0	0	0	-75
Gazprom	0	0	0	140	0	62	-28	-28	-56
T-Bills	0	0	23	18	-41	5	15	25	25
Medium and long-term loans, net	157	73	96	13	13	15	48	26	20
Disbursement	175	131	119	89	70	140	135	130	130
World Bank	67	50	0	38	15	60	60	50	50
EBRD	0	5	34	23	15	30	35	40	45
Other official (EU, USA, Rus.)	108	49	32	1	5	20	15	15	15
Private creditors	0	27	53	27	35	30	25	25	20
Amortization	-18	-58	-23	-76	-57	-125	-87	-104	-110
Other capital flows, net	-83	-76	-17	74	0	0	0	0	0
Errors and omissions	-105	-10	-13	-11	0	0	0	0	0
Overall balance	-110	-55	-37	86	-275	106	90	90	10
Financing	110	55	38	-88	222	-106	-90	-90	-10
Use of IMF credit	72	65	25	1	-66	20	23	24	21
disbursement	72	65	32	21	0	88	49	40	40
amortization	0	0	-7	-20	-66	-67	-26	-16	-19
Change in Gross official reserves	-102	-77	-57	-52	222	-57	-113	-115	-31
including interest to IMF	-4	-8	-10	-11	-11	-7	-9	-6	-5
Debt arrears and rescheduling	140	67	70	-37	66	-70	0	0	0

MAIN MACROECONOMIC INDICATORS (pessimistic scenario)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Real GDP growth rate	-30.9%	-1.4%	-7.8%	1.6%	-8.6%	-5.0%	-1.5%	1.0%	2.5%
Nominal GDP (excl. Transnistria), lei million	4737	6480	7658	8917	8804	13750	34361	51293	58201
Nominal GDP, USD million	1164	1443	1665	1933	1630	929	751	765	661
GDP per capita, USD	322	400	463	538	454	259	209	213	148
Annual inflation rate (end period)	104.6%	23.8%	15.1%	11.2%	18.3%	140.8%	80.1%	45.4%	35.8%
Average inflation rate	487.0%	30.0%	24.0%	12.0%	7.7%	64.4%	153.7%	47.8%	10.7%
Consolidated general govt. revenues, lei million	1848	2556	2835	3473	3270	4125	10308	14875	16296
Consolidated general govt. expenditures, lei million	2348	2993	3418	4165	3583	4813	12713	16927	17460
Budget balance, lei million	-280.5	-437	-583	-692	-313	-688	-2405	-2052	-1164
Budget balance as % of GDP	-5.9%	-6.7%	-7.6%	-7.8%	-3.6%	-5.0%	-7.0%	-4.0%	-2.0%
Internal debt, million lei	270	477	737	940	1500	1850	1900	1970	2100
Internal debt, USD million	63	106	158	202	180	51	33	25	21
Stock of foreign debt, USD million	627	766	917	1006	923	866	858	868	839
Stock of foreign debt as % of GDP	53.8%	53.1%	55.1%	52.0%	56.6%	93.1%	114.2%	113.5%	126.9%
New borrowing, USD million	247	197	181	185	70	115	105	140	175
Debt servicing (principal+interest), USD million	32	81	64	147	207	219	154	167	233
NBM gross forex reserves, USD million	180	257	314	366	144	111	153	201	285
NBM rez. In months of imports of GFS	2.85	3.03	3.00	3.07	1.42	1.26	1.70	2.17	3.03
NBM net forex reserves, USD million	17	26	66	131	5	-2	41	71	111
Cash in circulation M0, million lei	345	639	731	972	855	2566	5332	7980	12307
M2, million lei	676	1107	1292	1739	1357	3038	5999	9020	14179
Broad money (at current exchange rate), million lei	749	1244	1439	1929	1756	3901	7656	11981	19812
Money multiplier	1.36	1.59	1.68	1.72	1.66	1.31	1.31	1.38	1.50
Dollarization of deposits	18.2%	22.6%	20.7%	19.8%	44.2%	64.5%	71.2%	73.9%	75.0%
Velocity of M3	6.3	5.2	5.3	4.6	5.0	3.5	4.5	4.3	2.9
Monetization of the economy	15.8%	19.2%	18.8%	21.6%	19.9%	28.4%	22.3%	23.4%	34.0%
Ratio gross rezerves / M3	102.5%	92.8%	101.4%	88.4%	68.1%	102.9%	115.4%	132.9%	144.4%
End-year exchange rate, lei/1USD	4.27	4.50	4.65	4.66	8.32	35.99	57.63	79.15	100.39
Average exchange rate, lei/1USD	4.07	4.5	4.6	4.6	5.4	14.8	45.7	67.0	88.0
Nominal end-year annual appreciation(+)/depreciation(-), MDL/USD	–17.3%	–5.4%	–3.4%	–0.2%	–78.6%	–332.5%	–60.1%	–37.4%	–26.8%
Nominal end-year annual appreciation(+)/depreciation(-), USD/MDL	–14.8%	–5.1%	–3.2%	–0.2%	–44.0%	–76.9%	–37.5%	–27.2%	–21.2%
Real end-year annual appreciation(+)/depreciation(-)	+74.4%	+17.5%	+11.4%	+10.9%	–33.8%	–44.3%	+12.5%	+5.9%	+7.1%

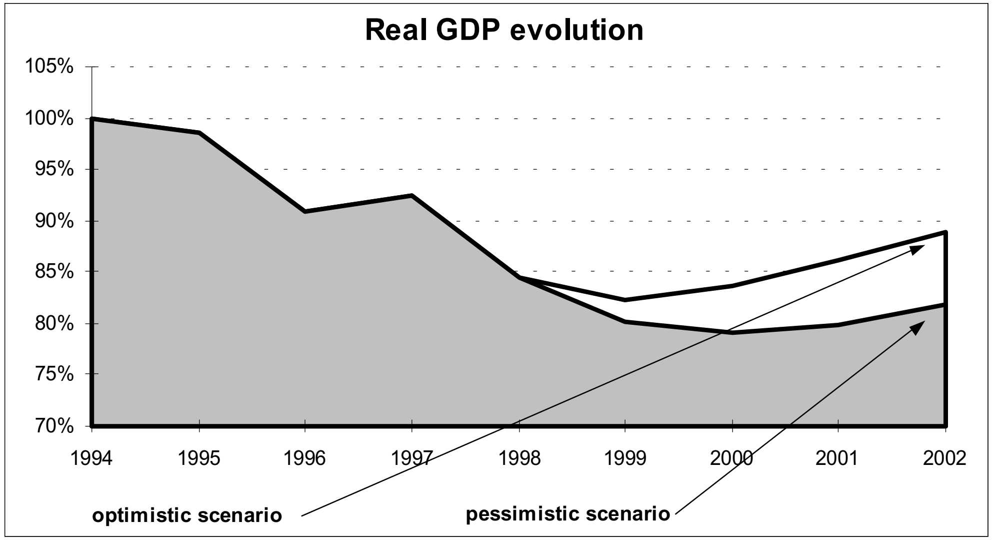
** Included loans from IMF, WB, EBRD, EU, USA, Russia, other creditors and Eurobond issues*

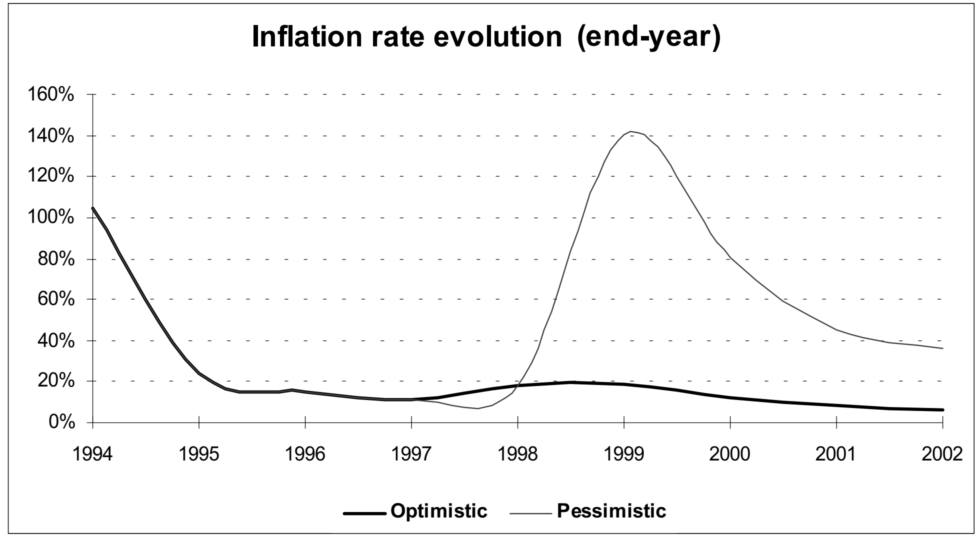
BALANCE OF PAYMENTS (pessimistic scenario)

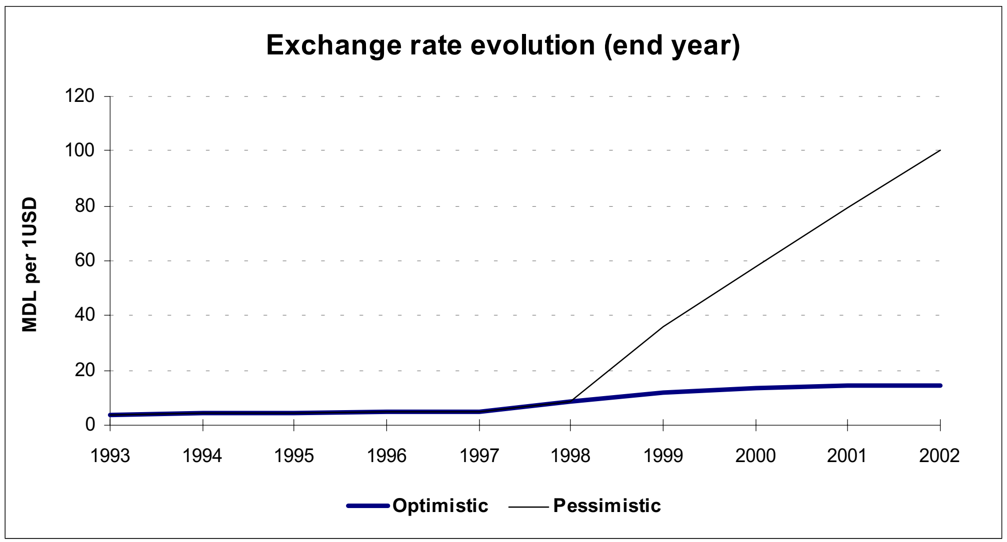
USD million

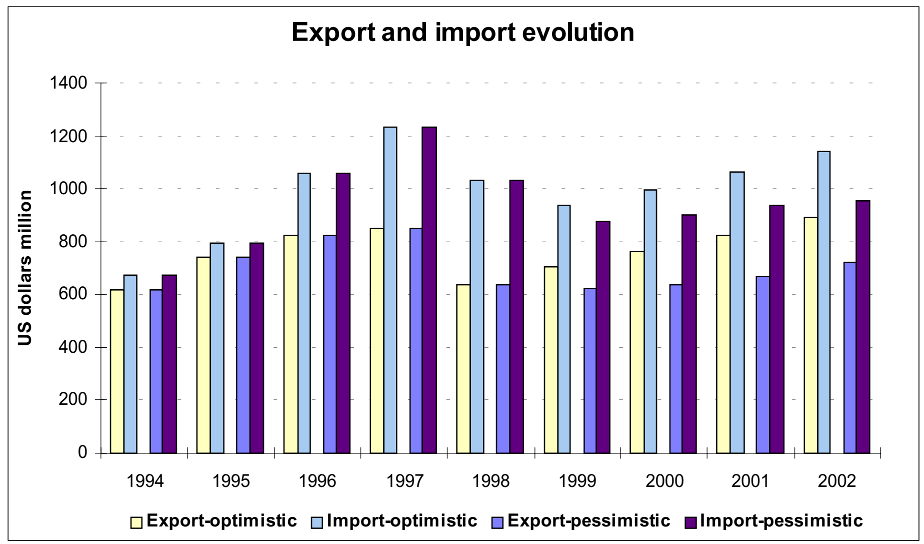
	1994	1995	1996	1997	1998	1999	2000	2001	2002
Current account	-97	-115	-209	-309	-300	-180	-182	-161	-108
Current account, as % of GDP	-8.3%	-8.0%	-12.6%	-16.0%	-18.4%	-19.3%	-24.3%	-21.1%	-16.4%
Trade balance	-54	-55	-234	-384	-390	-255	-262	-266	-238
Exports (fob)	618	739	822	851	640	621	639	671	718
Exports, yr/yr	--	119.6%	111.2%	103.5%	75.0%	97.0%	103.0%	105.0%	107.0%
Imports (fob)	672	794	1056	1235	1030	876	902	938	957
Import, yr/yr	--	118.2%	133.0%	117.0%	83.4%	85.0%	103.0%	104.0%	102.0%
Services, net	-51	-96	-78	-63	-50	-55	-50	-45	-40
Income, net	-16	-29	-40	-62	-80	-90	-90	-90	-90
incl. interest payments for loans & bonds	-10	-15	-23	-39	-43	-39	-37	-33	-26
Current transfers, net	24	65	143	200	220	220	220	240	260
incl. veniturile celor ce lucr. peste hotare	--	--	80	80	100	100	110	110	110
Capital and finance account	92	71	185	406	25	80	130	145	131
Direct Investment	18	73	53	79	70	50	100	160	200
Foreign direct investments, as % of GDP	1.5%	5.1%	3.2%	4.1%	4.3%	5.4%	13.3%	20.9%	30.3%
Portfolio investment, net	0	0	53	240	-58	5	-18	-11	-74
Eurobonds	0	0	30	75	-30	0	0	0	-75
Gazprom	0	0	0	140	0	0	-28	-28	-28
T-Bills	0	0	23	18	-41	1	5	10	20
Medium and long-term loans, net	157	74	96	13	13	-25	-2	-4	5
Disbursement	175	132	119	89	70	80	85	100	115
World Bank	67	50	0	38	15	30	40	50	60
EBRD	0	5	34	23	15	20	20	25	30
Other official (EU, USA, Rus.)	108	49	32	1	5	5	5	5	5
Private creditors	0	27	53	27	35	25	20	20	20
Amortization	-18	-58	-23	-76	-57	-105	-87	-104	-110
Other capital flows, net	-83	-76	-17	74	0	50	50	0	0
Errors and omissions	-105	-10	-13	-11	0	0	0	0	0
Overall balance	-110	-54	-37	86	-275	-100	-52	-17	23
Financing	110	55	38	-88	222	100	52	17	-23
Use of IMF credit	72	65	25	1	-66	-32	-6	14	41
disbursement	72	65	32	21	0	35	20	40	60
amortization	0	0	-7	-20	-66	-67	-26	-26	-19
Change in Gross official reserves	-102	-77	-57	-52	222	32	-42	-48	-84
including interest to IMF	-4	-8	-10	-11	-11	-7	-5	-4	-3
Debt arrears and rescheduling	140	67	70	-37	66	100	100	50	20

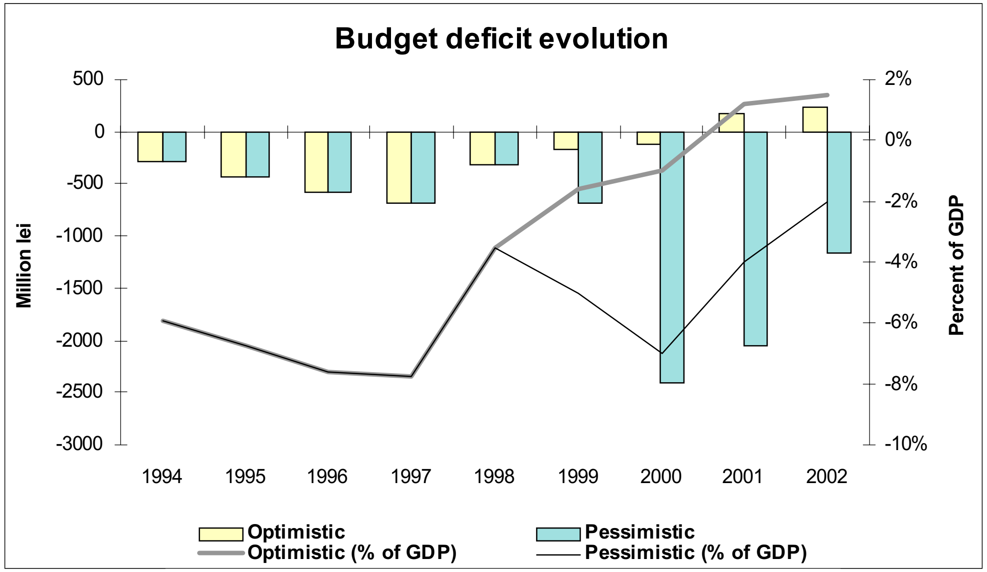
Optimistic and pessimistic scenarios: comparative charts



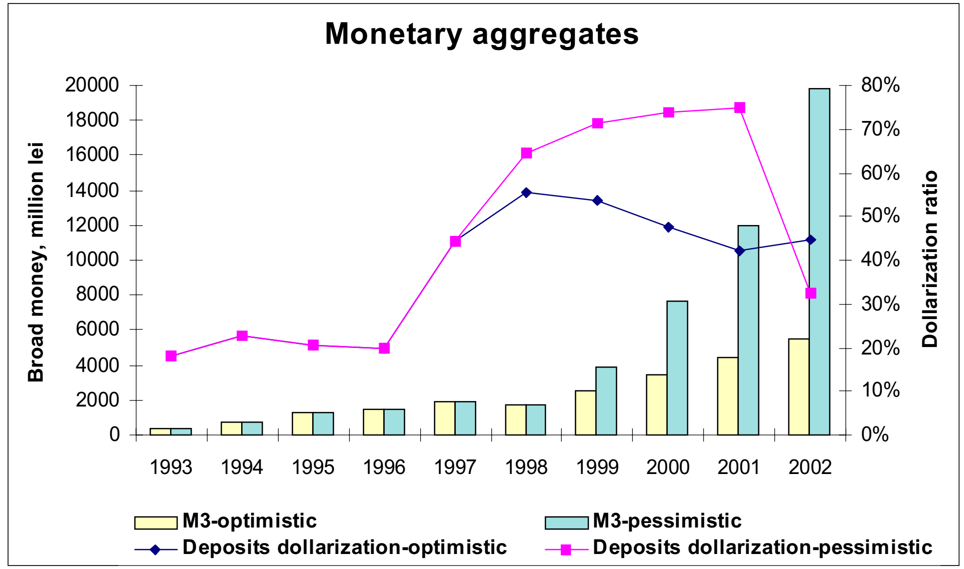




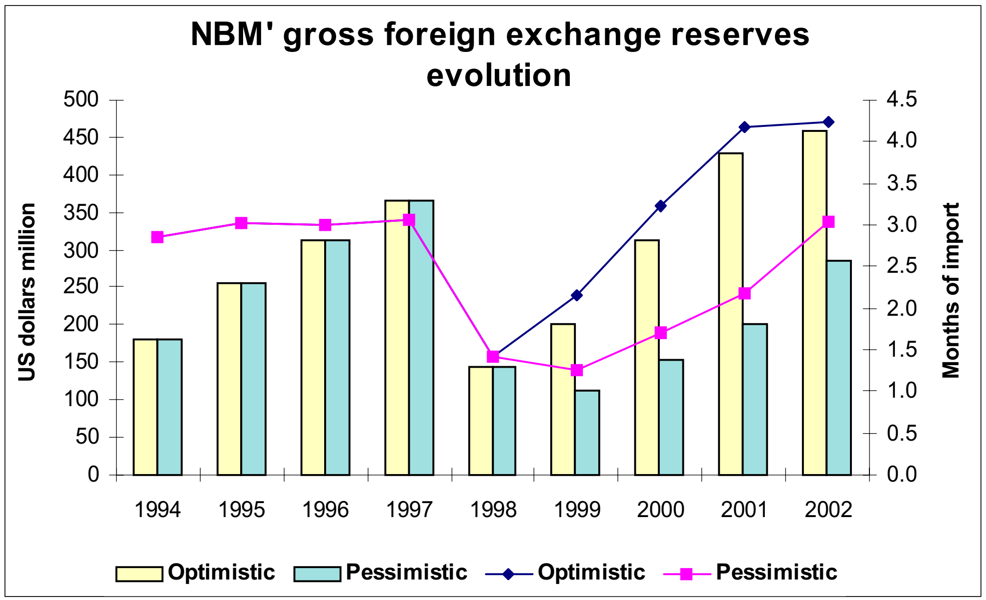




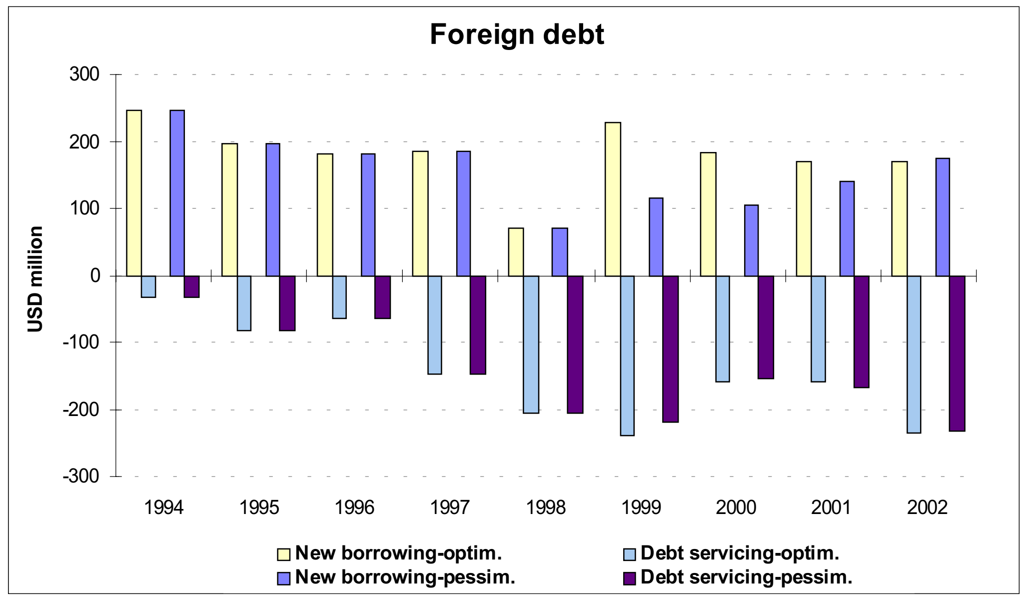
Budget deficit evolution
Million lei
Percent of GDP
500
0
-500
-1000
-1500
-2000
-2500
-3000
2%
0%
-2%
-4%
-6%
-8%
-10%
1994
1995
1996
1997
1998
1999
2000
2001
2002
Optimistic
Pessimistic
Optimistic (% of GDP)
Pessimistic (% of GDP)



Monetary aggregates
Broad money, million lei
Dollarization ratio
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
80%
70%
60%
50%
40%
30%
20%
10%
0%
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
M3-optimistic
M3-pessimistic
Deposits dollarization-optimistic
Deposits dollarization-pessimistic



NBM' gross foreign exchange reserves evolution
US dollars million
Months of import
500
450
400
350
300
250
200
150
100
50
0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1994
1995
1996
1997
1998
1999
2000
2001
2002
Optimistic
Pessimistic
Optimistic
Pessimistic



Foreign debt
USD million
300
200
100
0
-100
-200
-300
1994
1995
1996
1997
1998
1999
2000
2001
2002
New borrowing-optim.
Debt servicing-optim.
New borrowing-pessim.
Debt servicing-pessim.

4.2. Flow of Funds model (tables)

Flow of Funds Account, 1994-mln.lei

Transactions/sectors	Total (1)	Domestic economy – Include: General government (2)	Private sector (3)	Banking System (4)	Rest of the world (5)	Horiz. check (6)
GDP	**4735**					
Gross national disposable income (GNDI)	4767	1541	3226			0
Final consumption	3572	2591	981			0
Gross investment	914	379	535			0
Change in stocks	451		451			0
Exports of goods and nonfactor						0
services 1/	2643				-2643	0
Imports of goods and nonfactor						
services 1/	-3069				3069	
Net factor income	-65				65	0
Official transfers	97				-97	0
Statistical discrepancy	224		224			0
Nonfinancial balances	**-394**	**-1429**	**1035**		**394**	
Foreign financing		**952**	**41**	**-138**	**-855**	
Nonmonetary		384	41		-425	0
Direct investment			73		-73	0
Net foreign borrowing,		384	-32		-352	0
Increase of the energy and other arrears		568			-568	
Monetary				-138	138	0
Change in net foreign assets				-138	138	0
Monetary Authorities				-87	87	
DMB				-51	51	
Domestic financing		**367**	**-302**	**-65**		
Monetary		382	-317	-65		0
Domestic credit		382	84	-466		0
Broad money			-401	401		0
Nonmonetary		-15	15			0
Non-bank		-15	15			0
Increase in budget expenditure arrears		**110**	**-110**			
Net errors and omissions 2/			**-664**	**203**	**461**	
Vertical Check		0	0	0	0	

1/ The values of exports and imports of goods and nonfactor services differ between the national income accounts data and balance of payments. The figures used in this table are taken from the balance of payments.

2/ Balancing item calculated as the difference between nonfinancial balances and total financing.

3/ 2-nd column - General Govern. and Public sector operations (including debt and energy arrears/resched., change in budget expenditure arrears, state enterprises balance)

Flow of Funds Account, 1995-mln.lei

Transactions/sectors	Total	Domestic economy			Rest of the world	Horiz. check
		Include				
		General government	Private sector	Banking System		
	(1)	(2)	(3)	(4)	(5)	(6)
GDP	**6480**					
Gross national disposable income (GNDI)	6642	2328	4314			0
Final consumption	5371	2964	2407			0
Gross investment	1034	349	685			0
Change in stocks	578		578			0
Exports of goods and nonfactor						0
services 1/	3902				-3902	0
Imports of goods and nonfactor						
services 1/	-4580				4580	
Net factor income	-130				130	0
Official transfers	292				-292	0
Statistical discrepancy	175		175			0
Nonfinancial balances	**-516**	**-985**	**468**		**516**	
Foreign financing		**544**	**65**	**-33**	**-577**	
Nonmonetary		248	65		-313	0
Direct investment			328		-328	0
Net foreign borrowing,		248	-263		15	0
Increase of the energy and other arrears		296			-296	
Monetary				-33	33	0
Change in net foreign assets				-33	33	0
Monetary Authorities				-43	43	
DMB				10	-10	
Domestic financing		**295**	**-237**	**-58**		
Monetary		291	-233	-58		0
Domestic credit		291	259	-550		0
Broad money			-492	492		0
Nonmonetary		4	-4			0
Non-bank		4	-4			0
Increase in budget expenditure arrears		**145**	**-145**			
Net errors and omissions 2/			**-151**	**91**	**60**	
Vertical Check		0	0	0	0	

1/ The values of exports and imports of goods and nonfactor services differ between the national income accounts data and balance of payments. The figures used in this table are taken from the balance of payments.

2/ Balancing item calculated as the difference between nonfinancial balances and total financing.

3/ 2-nd column - General Government and Public sector operations (including debt and energy arrears/resched., change in budget expenditure arrears, state enterprises balance)

Flow of Funds Account, 1996-mln.lei

Transactions/sectors	Total (1)	Domestic economy – Include: General government (2)	Private sector (3)	Banking System (4)	Rest of the world (5)	Horiz. check (6)
GDP	**7659**					
Gross national disposable income (GNDI)	8133	2787	5346			0
Final consumption	7338	3834	3504			0
Gross investment	1517	356	1161			0
Change in stocks	351		351			0
Exports of goods and nonfactor						0
services 1/	4287				-4287	0
Imports of goods and nonfactor						
services 1/	-5722				5722	
Net factor income	-184				184	0
Official transfers	658				-658	0
Statistical discrepancy	-112		-112			0
Nonfinancial balances	**-961**	**-1403**	**442**		**961**	
Foreign financing		**774**	**251**	**6**	**-1031**	
Nonmonetary		452	251		-703	0
Direct investment			244		-244	0
Net foreign borrowing,		452	7		-459	0
Increase of the energy and other arrears		322			-322	
Monetary				6	-6	0
Change in net foreign assets				6	-6	0
Monetary Authorities				-142	142	
DMB				148	-148	
Domestic financing		**265**	**-174**	**-91**		
Monetary		114	-23	-91		0
Domestic credit		114	167	-281		0
Broad money			-190	190		0
Nonmonetary		151	-151			0
Non-bank		151	-151			0
Increase in budget expenditure arrears		**364**	**-364**			
Net errors and omissions 2/			**-155**	**85**	**70**	
Vertical Check		0	0	0	0	

1/ The values of exports and imports of goods and nonfactor services differ between the national income accounts data and balance of payments. The figures used in this table are taken from the balance of payments.

2/ Balancing item calculated as the difference between nonfinancial balances and total financing.

3/ 2-nd column - General Government and Public sector operations (including debt and energy arrears/resched., change in budget expenditure arrears, state enterprises balance)

Flow of Funds Account, 1997-mln.lei

Transactions/sectors	Total (1)	Domestic economy – Include: General government (2)	Private sector (3)	Banking System (4)	Rest of the world (5)	Horiz. check (6)
GDP	**8917**					
Gross national disposable income (GNDI)	9553	3076	6477			0
Final consumption	8692	4101	4591			0
Gross investment	1774	300	1474			0
Change in stocks	337		337			0
Exports of goods and nonfactor						0
services 1/	4532				-4532	0
Imports of goods and nonfactor services 1/	-6592				6592	
Net factor income	-286				286	0
Official transfers	922				-922	0
Statistical discrepancy	175		175			0
Nonfinancial balances	**-1424**	**-1326**	**-99**		**1424**	
Foreign financing		**763**	**846**	**-136**	**-1473**	
Nonmonetary		284	846		-1130	0
Direct investment			364		-364	0
Net foreign borrowing,		284	482		-766	0
Increase of the energy and other arrears		479			-479	0
Monetary				-136	136	0
Change in net foreign assets				-136	136	0
Monetary Authorities				-232	232	
DMB				96	-96	
Domestic financing		**562**	**-550**	**-13**		
Monetary		486	-473	-13		0
Domestic credit		486	16	-502		0
Broad money			-489	489		0
Nonmonetary		76	-76			0
Non-bank		76	-76			0
Increase in budget expenditure arrears		**0**	**0**			
Net errors and omissions 2/			**-198**	**149**	**49**	
Vertical Check		0	0	0	0	

1/ The values of exports and imports of goods and nonfactor services differ between the national income accounts data and balance of payments. The figures used in this table are taken from the balance of payments.

2/ Balancing item calculated as the difference between nonfinancial balances and total financing.

3/ 2-nd column - General Government and Public sector operations (including debt and energy arrears/resched., change in budget expenditure arrears, state enterprises balance)

Flow of Funds Account, 1998-mln.lei

Transactions/sectors	Total	Domestic economy			Rest of the world	Horiz. check
		Include				
		General government	Private sector	Banking System		
	(1)	(2)	(3)	(4)	(5)	(6)
GDP	**8804**					
Gross national disposable income (GNDI)	9627	3059	6569			0
Final consumption	9007	3915	5092			0
Gross investment	1930	294	1636			0
Change in stocks	355		355			0
Exports of goods and nonfactor						0
services 1/	4121				-4121	0
Imports of goods and nonfactor						
services 1/	-6472				6472	
Net factor income	-430				430	0
Official transfers	1254				-1254	0
Statistical discrepancy	-137		-137			0
Nonfinancial balances	**-1528**	**-1150**	**-377**		**1528**	
Foreign financing		**108**	**181**	**830**	**-1119**	
Nonmonetary		-274	181		93	0
Direct investment			344		-344	0
Net foreign borrowing,		-274	-163		437	0
Increase of the energy and other arrears		382			-382	
Monetary				830	-830	0
Change in net foreign assets				830	-830	0
Monetary Authorities				780	-780	
DMB				50	-50	
Domestic financing		**596**	**620**	**-1216**		
Monetary		710	506	-1216		0
Domestic credit		710	161	-871		0
Broad money			345	-345		0
Nonmonetary		-115	115			0
Non-bank		-115	115			0
Increase in budget expenditure arrears		**447**	**-447**			
Net errors and omissions 2/			**23**	**386**	**-409**	
Vertical Check		0	0	0	0	

1/ The values of exports and imports of goods and nonfactor services differ between the national income accounts data and balance of payments. The figures used in this table are taken from the balance of payments.

2/ Balancing item calculated as the difference between nonfinancial balances and total financing.

3/ 2-nd column - General Government and Public sector operations (including debt and energy arrears/resched., change in budget expenditure arrears, state enterprises balance)

Flow of Funds Account, 1999-mln.lei

Transactions/sectors	Total (1)	Domestic economy – Include: General govern. 4/ (2)	Private sector (3)	Banking System (4)	Rest of the world (5)	Horiz. check (6)
GDP	**11433**					
Gross national disposable income (GNDI)	13025	3080	9946			0
Final consumption	10979	2822	8157			0
Gross investment	2858	457	2401			0
Change in stocks	0		0			0
Exports of goods and nonfactor						0
services 1/	8607				-8607	0
Imports of goods and nonfactor						
services 1/	-11011				11011	
Net factor income	-846				846	0
Official transfers	2438				-2438	0
Statistical discrepancy	0		0			0
Nonfinancial balances	**-812**	**-200**	**-612**		**812**	
Foreign financing		**-54**	**1544**	**-736**	**-754**	
Nonmonetary		-54	1544		-1490	0
Direct investment 2/		199	796		-995	0
Net foreign borrowing,		-253	748		-495	0
Increase of the energy and other arrears		0			0	
Monetary				-736	736	0
Change in net foreign assets				-736	736	0
Monetary Authorities				-346	346	
DMB				-389	389	
Domestic financing		**254**	**-500**	**246**		
Monetary		174	-420	246		0
Domestic credit		174	-27	-147		0
Broad money			-393	393		0
Nonmonetary		80	-80			0
Non-bank		60	-60			0
Privatization by domestic investors		20	-20			
Increase in budget expenditure arrears		**0**	**0**			
Net errors and omissions 3/			**-432**	**489**	**-58**	
Vertical Check		0	0	0	0	

1/ The values of exports and imports of goods and nonfactor services differ between the national income accounts data and balance of payments. The figures used in this table are taken from the balance of payments.

2/Including privatization by foreign investors

3/ Balancing item calculated as the difference between nonfinancial balances and total financing.

4/ 2-nd column - General Government and Public sector operations (including debt and energy arrears/resched., change in budget expenditure arrears, state enterprises balance)

Flow of Funds Account, 2000-mln.lei

Transactions/sectors	Total (1)	Domestic economy – Include: General govern. 4/ (2)	Private sector (3)	Banking System (4)	Rest of the world (5)	Horiz. check (6)
GDP	**13198**					
Gross national disposable income (GNDI)	15314	3397	11917			0
Final consumption	12877	3001	9877			0
Gross investment	3299	528	2771			0
Change in stocks	0		0			0
Exports of goods and nonfactor						0
services 1/	11703				-11703	0
Imports of goods and nonfactor services 1/	-14682				14682	
Net factor income	-1121				1121	0
Official transfers	3237				-3237	0
Statistical discrepancy	0		0			0
Nonfinancial balances	**-863**	**-132**	**-731**		**863**	
Foreign financing		**41**	**2403**	**-1516**	**-929**	
Nonmonetary		41	2403		-2444	0
Direct investment 2/		374	1245		-1619	0
Net foreign borrowing,		-332	1158		-826	0
Increase of the energy and other arrears		0			0	
Monetary				-1516	1516	0
Change in net foreign assets				-1516	1516	0
Monetary Authorities				-955	955	
DMB				-561	561	
Domestic financing		**91**	**-1490**	**1399**		
Monetary		11	-1410	1399		0
Domestic credit		11	-400	389		0
Broad money			-1010	1010		0
Nonmonetary		80	-80			0
Non-bank		60	-60			0
Privatization by domestic investors		20	-20			
Increase in budget expenditure arrears		**0**	**0**			
Net errors and omissions 3/			**-183**	**117**	**66**	
Vertical Check		0	0	0	0	

1/ The values of exports and imports of goods and nonfactor services differ between the national income accounts data and balance of payments. The figures used in this table are taken from the balance of payments.

2/Including privatization by foreign investors

3/ Balancing item calculated as the difference between nonfinancial balances and total financing.

4/ 2-nd column - General Government and Public sector operations (including debt and energy arrears/resched., change in budget expenditure arrears, state enterprises balance)

Flow of Funds Account, 2001-mln.lei

Transactions/sectors	Domestic economy: Total (1)	Include: General govern. 4/ (2)	Include: Private sector (3)	Include: Banking System (4)	Rest of the world (5)	Horiz. check (6)
GDP	**14897**					
Gross national disposable income (GNDI)	17523	3792	13732			0
Final consumption	14849	3017	11831			0
Gross investment	3724	596	3128			0
Change in stocks	0		0			0
Exports of goods and nonfactor						0
services 1/	13963				-13963	0
Imports of goods and nonfactor						
services 1/	-17639				17639	
Net factor income	-1244				1244	0
Official transfers	3871				-3871	0
Statistical discrepancy	0		0			0
Nonfinancial balances	**-1049**	**179**	**-1228**		**1049**	
Foreign financing		**-333**	**3079**	**-1581**	**-1165**	
Nonmonetary		-333	3079		-2746	0
Direct investment 2/		277	1659		-1936	0
Net foreign borrowing,		-610	1420		-810	0
Increase of the energy and other arrears		0			0	
Monetary				-1581	1581	0
Change in net foreign assets				-1581	1581	0
Monetary Authorities				-1046	1046	
DMB				-535	535	
Domestic financing		**154**	**-1737**	**1583**		
Monetary		104	-1687	1583		0
Domestic credit		104	667	-771		0
Broad money			-2354	2354		0
Nonmonetary		50	-50			0
Non-bank		30	-30			0
Privatization by domestic investors		20	-20			
Increase in budget expenditure arrears		**0**	**0**			
Net errors and omissions 3/			**-113**	**-2**	**115**	
Vertical Check		0	0	0	0	

1/ The values of exports and imports of goods and nonfactor services differ between the national income accounts data and balance of payments. The figures used in this table are taken from the balance of payments.

2/Including privatization by foreign investors

3/ Balancing item calculated as the difference between nonfinancial balances and total financing.

4/ 2-nd column - General Government and Public sector operations (including debt and energy arrears/resched., change in budget expenditure arrears, state enterprises balance)

Flow of Funds Account, 2002-mln.lei

Transactions/sectors	Domestic economy Total (1)	Include: General govern. 4/ (2)	Private sector (3)	Banking System (4)	Rest of the world (5)	Horiz. check (6)
GDP	**16465**					
Gross national disposable income (GNDI)	19221	4203	15019			0
Final consumption	15370	3297	12073			0
Gross investment	4116	659	3458			0
Change in stocks	0		0			0
Exports of goods and nonfactor						0
services 1/	15375				-15375	0
Imports of goods and nonfactor services 1/	-18397				18397	
Net factor income	-1305				1305	0
Official transfers	4061				-4061	0
Statistical discrepancy	0		0			0
Nonfinancial balances	**-265**	**247**	**-512**		**265**	
Foreign financing		**-431**	**2038**	**-1282**	**-325**	
Nonmonetary		-431	2038		-1607	0
Direct investment 2/		290	1886		-2176	0
Net foreign borrowing,		-721	152		569	0
Increase of the energy and other arrears		0			0	
Monetary				-1282	1282	0
Change in net foreign assets				-1282	1282	0
Monetary Authorities				-521	521	
DMB				-762	762	
Domestic financing		**184**	**-1449**	**1265**		
Monetary		134	-1399	1265		0
Domestic credit		134	-724	590		0
Broad money			-675	675		0
Nonmonetary		50	-50			0
Non-bank		30	-30			0
Privatization by domestic investors		20	-20			
Increase in budget expenditure arrears		**0**	0			
Net errors and omissions 3/			**-77**	**17**	**59**	
Vertical Check		0	0	0	0	

1/ The values of exports and imports of goods and nonfactor services differ between the national income accounts data and balance of payments. The figures used in this table are taken from the balance of payments.

2/Including privatization by foreign investors

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4.3. Corruption phenomenon: increasing threat for the economy

Corruption = Monopoly + Discretion – Accounting[6]

The large-scale spread of corruption and shadow economy are phenomena characteristic to a country in transition. Since the beginning of '90s, in the Republic of Moldova these phenomena keep intensifying. As preconditions for that could be mentioned the weakness of the newly formed state and its structures, contradictions and lack of transparency of the legislation system, dismemberment of state, inefficiency of customs service, low wages of state employees. The large spread of this phenomenon represents a threat to the security of the state.

If by the beginning of '90s one of the biggest problems for the transition countries was shadow economy, and the main objective of the state policy in this domain was supposed to be the creation of conditions for the incorporation of shadow economy into the formal one, then during the last years the problem modified into a national tragedy for a series of countries – corruption. Corruption in many cases undertook the mechanisms, structures, and functions of the state.

If at the beginning of the decade the corruption in transition countries was in a big part as a brake to the economic development, creating obstacles for local producers and pushing out the potential foreign investors, then, actually it simply blocks the reforms in the country. Any amendment of the acting legislation does not have any positive expected effects due to the impact of corruption; the economy does not develop according to market rules, there are no competition and progress in utilizing the disposable resources, state debts grow spontaneously, pauperization of the society deepens, a decrease of population's credibility in the state and a creation of a conflict situation take place.

A simple ***definition of corruption*** can be formulated as follows: abuse of power for private gain by the state officials.

Main forms of corruption are: acceptance, soliciting or extortion of bribes, patronage, nepotism, theft of public goods, causing losses to the state, political corruption, etc.

Bribes – in order to obtain state contracts (choice of firms, terms and conditions for contracts), assure state guarantees for credits, obtain facilities, material and financial benefits, preferential support of patronaged enterprises, shading investigated violations, non-application or diminishing penalties, obtaining licenses, exclusive rights for economic activities, for speeding-up delivering documents, obtaining political positions, employment in state structures and prestigious positions.

Thefts – spontaneous privatization of public enterprises, equipment, financial sources, uncontrolled utilization of enterprise funds, obtaining credits without repayment, payment of wages to non-existent employees, etc.

Political corruption – violation of the election legislation, financing the electoral campaigns, solving parliamentary conflicts in illegal modalities, lobbying;

Causes of corruption can be economic, institutional, politic, social and moral:

- The *economic* ones include: unlivable budget, low wages for state employees, delays in payment of wages;
- The *institutional* ones are: lack of real will to fight corruption, lack of strategy in this field, high level of discretion in the work of legal bodies, an inadequate accounting system, lack of

[6] Governance and the Economy in Africa: Tools for Analysis and Reform of Corruption, IRIS, University of Maryland at College Park

transparency in the legal system, weak state policy generating rent-seeking, career promotion without real performance.

- *Political* causes include: transformation of fighting corruption into fighting political opponents, interest of some political groups in the economic and financial collapse of the state, thus willing to return to the old dictatorial system, import of corruption.
- *Social and moral* causes: demoralization of the society, ethical values erosion caused by the corruption amongst the top level employees, insufficient information of population, insufficient work of mass-media, public tolerance.

*Corruption can have a **strong impact on the** economic, political, social and ecological **security of the state**.*

Economic consequences of corruption are*:*

- Growth of transactional costs, especially for economic activities in small business, diminishing competitiveness for goods and services;
- Discouragement of investments and innovational ideas;
- Growing costs and diminishing of public projects quality;
- Sliding of economy towards the underground sector;
- Unfairness, non-loyal competition by using state institutions as repressing tools, falsification of information regarding competitors, technical and industrial espionage, racketing, signing monopolistic agreements, etc.
- Fund embezzlement, diminishing economic efficacy;
- Macroeconomic instability, vulnerability of the country to economic crises.

Social consequences:

- Creation of additional tax burden;
- Strong negative impact on the vulnerable strata of the society, having no political influence vulnerable strata often have to face a heavier social pressure;
- Reduction of quality of goods and services;

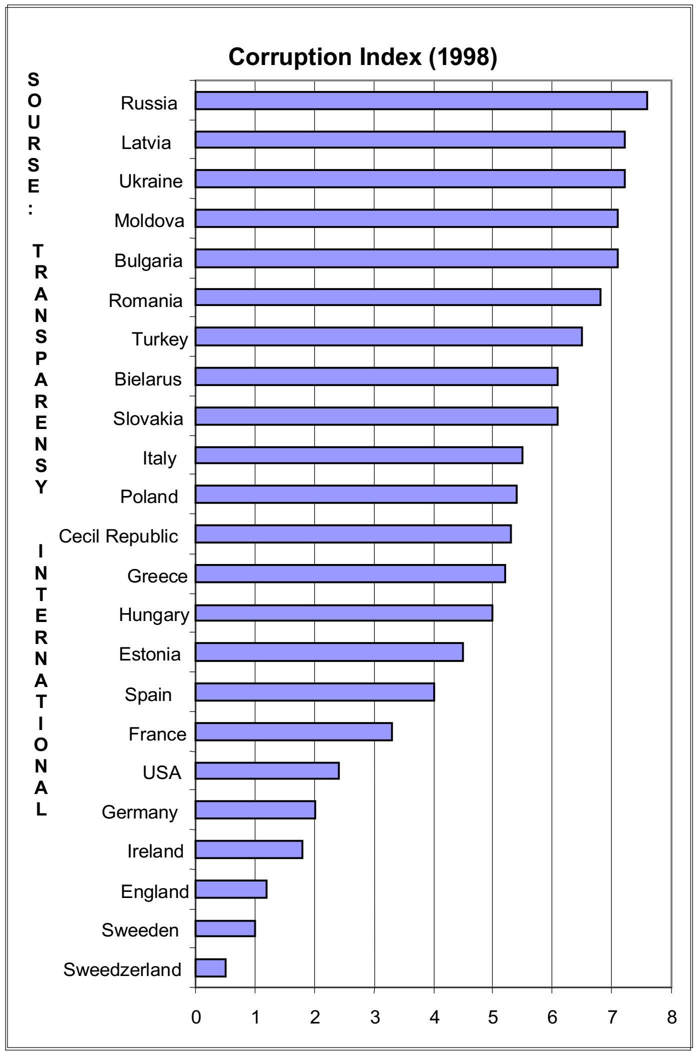
Consequences on the state political security:

- Formation of an economic and political clan, which imposes to the society its wish, regardless to the needs of the society, and contributing to the huge growth of state indebtedness;
- Diminishing payments to the budget result in the failure of the small business supporting, social, educational, health and environment policies, as well as in unfair work retribution in the budget waged sphere;
- Paralysis of state institutions, affection of citizens' rights and constitutional guarantees, discredit of the state system, lack of respect towards the state on behalf of the population;
- Deterioration of economical and political security of the state.

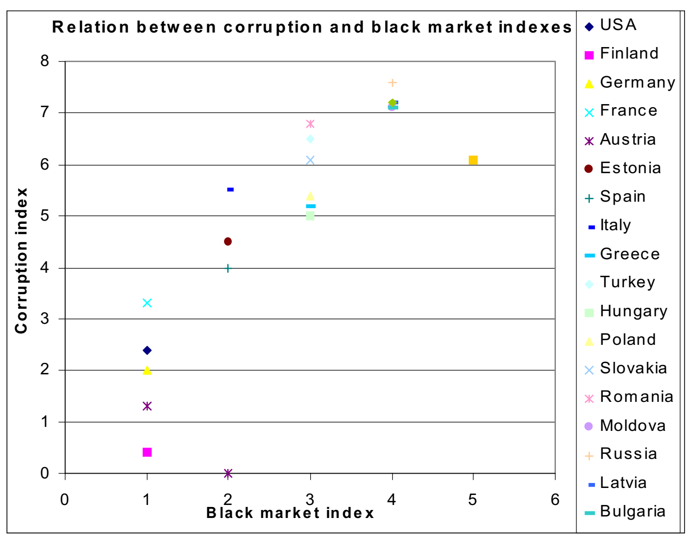
Environment consequences: Deterioration of the environment due to the fact that the society is imputed interests of certain separate groups - immediate profits without redemption of environmental losses.

The results of numerous cross-countries comparative studies of shadow economy indexes and economic performance (Heritage Foundation, Transparency International, Freedom House Rankings) show a quantitative relation between the growth of the degree of corruption of the country, the volume of illicit transactions and economic decline.

Corruption index (Transparency International) in the countries of the European Union fluctuates from 0.54 in Denmark (meaning a practical lack of corruption) to 5.5 in Italy, total corruption index corresponding to the value of 10. The average for EU oscillates around 2.5. For the countries in transition, which hope to join in the EU, this index is at least 2.5 times bigger, reaching from 4.5 in Estonia to 7.6 in Russia.



On this scale Moldova is placed together with Bulgaria after Romania, and is followed by the Ukraine. However, it should be mentioned that the evaluation of the corruption index is more likely based on the evaluation of the level of perception of corruption by the population, rather than on the evaluation of its real dimensions. Therefore, in a traditionally more democratic country this index can be overestimated. At present, there are attempts to develop the Bribery Propensity Index.



High level of corruption in transition countries implies growth of black market (Heritage Foundation), the index of black market varying from its minimum –1 in Austria, France, Germany, Finland, 2 - in Italy, Spain, Estonia, 3 - in Greece, Turkey, Hungary, Poland, Romania, 4 – in Latvia, Bulgaria, Lithuania, Moldova, Ukraine, Russia, and reaching its maximum of - 5 in Georgia and Belarus. Calculations also show a strong inverse link between the degree of corruption and GDP per capita. An inverse relation between corruption index and the index of economic performance in transition countries persists, the latter having as basic components the politic system, the degree of mass-media freedom, the rule of law, the degree of public administration, the development of private sector. On the picture the relation between these two indexes can be clearly seen.

Freedom House Ranking - composition								
	political progres	ind.civil society	independ. mass media	legal system	public ad- ministr.	privati- zation	econ. perform.	privat share in GDP
Albania	4.25	4.25	4.75	4.75	4.75	3.75	4.25	75
Armenia	5.5	3.5	5.25	4.75	4.5	4	4	50
Belarus	6	5.25	6.25	6	6	6	6	15
Bulgaria	3.25	4	3.75	4.25	4.25	5	5.75	45
Croatia	4	3.5	4.75	4.75	4	4	3.75	50
Chech Republic	1.25	1.5	1.25	1.5	2	2	1.75	75
Estonia	2	2.25	1.75	2.25	2.25	2.25	2	70
Hungary	1.25	1.25	1.5	1.75	1.75	1.5	1.75	70
Latvia	2	2.25	1.75	2.25	2.5	2.5	2.5	60
Lithuania	2	2.25	1.75	2.25	2.5	2.25	2.75	65
Moldova	3.25	3.75	4	4.25	4.25	4	4	40
Poland	1.5	1.25	1.5	1.5	1.75	2.25	1.75	60
Romania	3.25	3.75	4.25	4.25	4.25	4.5	4.75	60
Russia	3.5	3.75	3.75	4	4	3	4	60
Slovakia	3.75	3.25	4.25	4	3.75	3.25	3.5	70
Slovenia	2	2	1.75	1.75	2.5	2.75	2	45
Ukraine	3.25	4	4.5	3.75	4.5	4.25	4.25	40

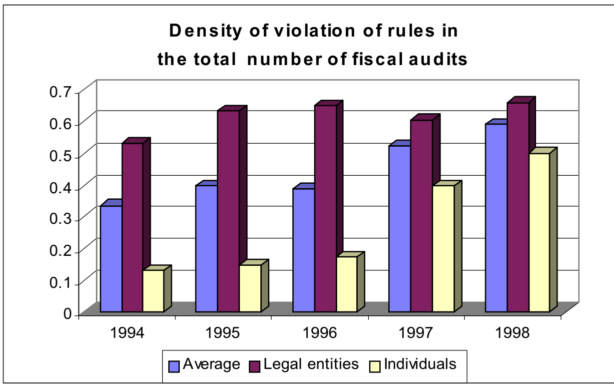
Corruption is a *self-generating process*. If the state employees do not receive their wages during 4-5 months, bribes become the only stable source of their income. Then an evolutionary shift takes place into a vicious circle: corruption → economic decline → insufficiency of sources for the budget → delays in wage payment for state workers → growth of corruption. Moreover, it is easier to blackmail and force a person perceived in corruption to repeat corruptive actions. Unwillingly, this person starts to belong to a strong repressing system.

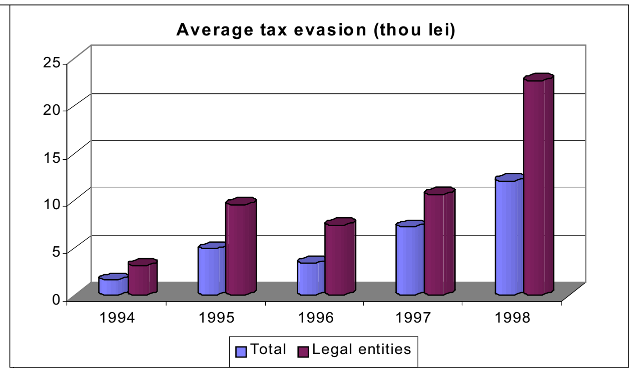
Therefore, starting from 1998, official data regarding the results of audits and inspections became more "optimistic". In 1998 there were registered 2910 violations of economic and financial legislation, by 244 less than in 1997, losses being estimated at 103 million lei. Chişinău City Police marked a decline by 13% in the number of registered crimes, although 298 cases of concealing crimes were discovered. There were collected 11% fewer taxes in Chişinău (853 million lei). The 10% decline in industrial production and an 18% inflation could not explain this phenomena. Two parallel processes take place: a) hiding or closing criminal files, b) decreasing rate of small crimes and growing of the big ones.

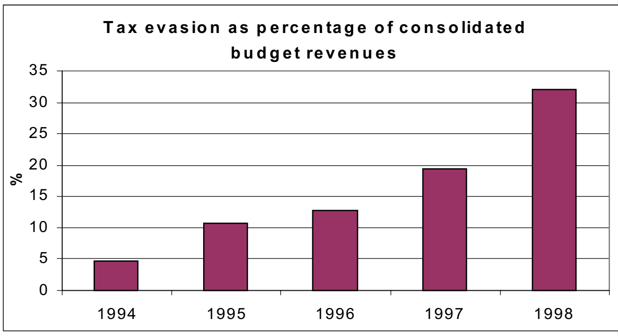
Unfortunately, the actual situation in the Republic of Moldova, as well as in many other countries in transition, does not contribute to an increase of credibility of Moldova as an economic and political partner. The share of underground economy got striking proportions and tax evasion raises continuously. The lack of control upon state employees' activity and low enforcement, as well as delays in payment of wages to the latter, contributed to the extension of corruption and increasing level of the economic crime in the Republic of Moldova.

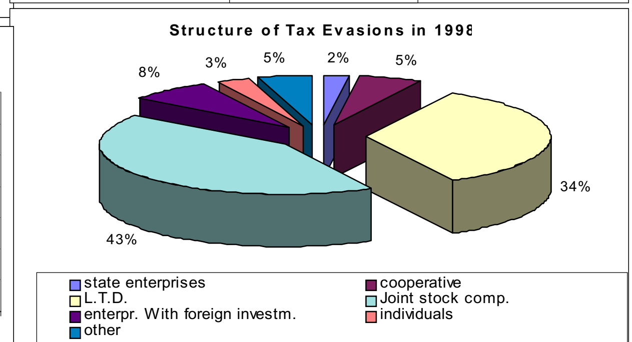
According to our estimates, the tax evasion in the Republic of Moldova grew up from 4% of the consolidated budget revenues in 1994 to 20% in 1997 and 32% in 1998. The average evaded tax rose from 7 thou lei per taxpayer in 1997 (10 thou lei per legal entity) to 12 thou lei in 1998 (23 thou lei for legal entity). The rate of rule breakers in the total number of entities subjected to audits grew from 305 in 1994 to 51% in 1997, and 57% in 1998.

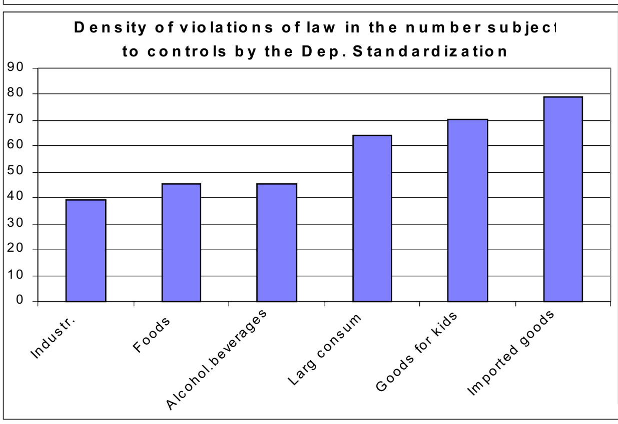
In 1998 the collaborators of the Department of Financial Control and Revision accomplished 9506 controls, by 2353 less than in 1997. Despite of that, the total sum of losses caused by illegal expenditures to the economic agents and state, shortages and embezzlements amounted to 87.4 mil. lei, in comparison to 36.3 million lei in 1997 (a 2.4-fold growth).

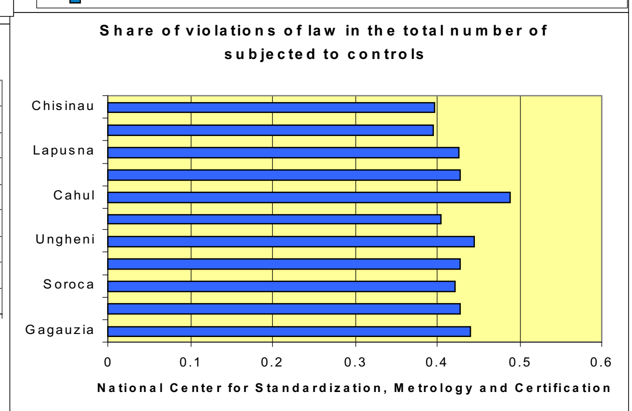












Data of the National Center for Standardization, Metrology and Certification show that the rate of law violations detected during the controls of consumer goods varied from 40% for foods to 70% for the goods for children. In the division – local-imported goods most of all account for the imported goods – 79%. The quality of goods varies throughout the country.

Data of the scientific-practical conference "Organized crime and shadow economy in the Republic of Moldova" held under the aegis of the Ministry of Internal Affairs of the Republic of Moldova, Academy of Police and the Independent Association of Criminology, shows that corruption in Moldova achieved striking proportions. Lack of state power creates conditions for emerging mechanisms and structures that quickly can substitute the state structures.

Ordered murders: an existing practice of repeated (2-3 times) temporary releases from jail of the convicted individuals, with a view to commit an ordered murder, is recognized. There are about 300 criminal groups, 35 criminal clans, which control the economic, political, and social performance of the country. Thus, the problems of non-payments are rather solved by pressures on behalf of criminal structures, playing the role of informal courts, by charging 50% of the indebted amount.

On the territory of Moldova there are four channels of *drug trafficking*. Only the monthly traffic of heroin is estimated to reach the volume of 150-200 kg (for information: the wholesale price of 1 kg of heroin amounts to $1.5 thou in Pakistan, 10 thou $ in Turkey, 40 thou $ in England, the retail price reaching $120 thou). On the territory of Moldova there are clandestine laboratories producing drugs based on local, much cheaper technologies, and this presents an essential threat for the local evidently poorer population. During the last five years the estimated number of addicted persons rose from 3 thou to 60 thou people. Only in 1998 their number grew 5 times in comparison to 1997. Drug industry is highly concentrated, about 60% of drug transactions are carried out by local Gypsies (for information: Gypsies make up about 0.3% of the total population of Moldova).

The annual volume of narco-business in Moldova is estimated at $200–250 million, this figure *exceeding 3.5-4 times the annual direct foreign investments* in Moldova. It is clear that the “efficacy” of running this brunch is definitely “higher”. Possibilities to corrupt the state officials are extremely big. That is why the list of narcotic and psychotropic substances proposed by the specialists of the Committee of Drug Control undergone essential “modifications” by the moment of its adoption and publication in the “Official Monitor”. A number of substances, which can be easily produced on the territory of Moldova, vanished from the above-mentioned list. That is why the custom service does not have an elementary facility of drug detecting dogs, there is not any database on drug trafficking, or an unique informational system of the force ministries and the criminal files do not “reach” the court (their total number having diminished from 15 in 1996 to 10 in 1997 and 9 files in 1998). That is why extremely expensive cars with four degree of protection are used for the transportation of drugs.

Smuggling: According to the data of custom service, the detected volume of smuggled goods grew from 2.7% of the total export-import in 1997 to 10.6% in 1998. During the same time, the number of criminal files reaching the court diminishes continuously, criminal files are closed (from 28 open criminal files no file was investigated in 1998).

Data regarding the *volume of illegal export-import transactions* are more relevant. An accomplishment of a cross-checking of Moldovan and Ukrainian information regarding Moldovan exports to Ukraine shows that the data from the Ukrainian side is almost double. This can not be explained solely by the “role” of Transnistria. The same situation takes place in the relationships with Russia. It is little probable that workers of the Ukrainian and Russian custom services are likely to be more honest than those from Moldova, therefore the real distortions could be even greater.

This fact could be not so surprising, if to take into account the current situations when custom services detain full trains with illegally transported goods, and after a call from the “top officials”, they are constrained to let the train move ahead.

The spectrum of corrupted actions characteristic to the *management of public property, accumulation and utilization of financial resources, execution of state control* is quite wide. Amongst the most characteristic to Moldova can be mentioned the following:

- Improper formation and utilization of the state budget funds, lack of methodological norms of their formation and utilization, illegal financing of structures and activities not envisioned in current legislation;
- Inefficient and irrational utilization of budget resources by the state-owned institutions due to improper organization of state-owned budget institutions, financing that leads to laundry of enormous amounts of state funds, improper utilization of investments and donations, including in foreign exchange, as well as their transfer to certain commercial structures that use them for a long time or for a symbolic fee;
- Irrational and inefficient utilization of investments and credits as a result of a bad allocation of state resources, improper utilization of investments and credits given to economic agents;
- Evasion of taxes, fees and other compulsory payments due to the state budget;
- Violation of price discipline, especially ungrounded increase of prices;

- Waste of public property as a result of intentional non-accounting of certain objects of state property, illegal rent of premises and equipment, ungrounded or illegal privatization of state property, violations while purchasing of 20% of shares by the personnel of the enterprises without any tender, diminishing the value of property, and excluding the former staff, including outsiders in privatization process, as well as unreal evaluation of property;
- Irrational and inefficient contracts with certain economic agents, especially with non-government structures;
- Unsatisfactory accounting of financial and economic activity which enables government officers to freely dispose of the state property, including budget resources, to their personal interests.

In a short while Moldova transformed into a corrupted and kleptomanian state, with a mafia-driven psychology and culture, and immoral nepotism. How could be explained the fact, if not through corruption and lobbying, that the legislation of Moldova even does not include the term “racket”, there are not foreseen special measures towards prostitution, it is not adopted a special system of gambling taxation? Moldova, being over-indebted for energy resources, imports natural gas at prices much higher than international ones, and does not even ask for charges on the transit of natural gas through its territory (for information: the payments for the transit of gas through the territory of Ukraine exceed the GDP of Moldova). More than this: Moldova does not have gas counters at the entrance and exit from its territory. The only explanation is a group interest, which is completely opposite to the interests of the whole society.

This situation is characteristic to autocratic states, where practice is missing of self-organization, based on horizontal links, reciprocal credibility and solidarity; in this type of states for a long time a bureaucratic hierarchy based on norms, mainly vertical relations of domination-subordination and tutelary-dependence were maintained.

Fighting corruption generates *immediate profits*. Revenues from fighting corruption exceed many times the costs. According to some Western estimations, the expenditures of Ł1 in fighting corruption at the local level generate on average Ł23, and about Ł250 on the international level[7].

The materials of the United Nations Commission for crime prevention show that the above mentioned phenomenon has widespread in the Central and East Europe during the last decade. These kinds of problems are included into the programs of seminars and congresses of many international bodies (*INTOSAI, EUROSAI, SIGMA, Accounting Court of the EU, World Bank, Working Group on briberies OECD, International Monetary Fund, etc.*).

The Defense Supreme Council of Romania adopted a proposal on establishing the National Institute for studies of corruption and organized crime under the Academy of Romania.

The goals of fighting corruption can be different:

- short run efficacy in the private sector;
- long run dynamic efficacy, economic growth;
- social equity, political legacy.

The durable strategic directions of fighting corruption in the Republic of Moldova should include deregulation, privatization, transparency, institutional reform, improvement of the enforcement system, reduction of the monopoly force in all spheres, clarifying the degree of discretion in the activity of decision makers.

Implementation of a ***policy fighting corruption*** needs the reform in legislation, the institutional reform, improvement of the system of regulation of fiscal audits, reduction of the public tolerance:

[7] I. Bogdan, Corruption and economic crime, “Curierul Economic”, 45(347)

Legislation reform:

- Appealing for assistance on behalf of the international institutions in fighting corruption and economic crimes, applying for an external system of monitoring;
- Appealing to projects financed through foreign technical assistance to perform a juridical expertise of laws and amendments proposed for adoption, improving the legal system, removing of contradictions, double meanings, etc.;
- Perfecting of preventive anti-crime measures;
- A clear definition of a penalty system for law breakers;

Amelioration of fiscal control procedures:

- Simplification of regulations of state controls and audits;
- Systematization and unification of the work carried out by different audit agencies;
- Publishing a clear information regarding controls, rights and obligations of control agencies;
- Establishing a unit for registering and regulating the number of controls of the same enterprise;
- Reforming the fiscal and accounting systems, simplification and ensuring its transparency;
- Perfecting the qualification level of control and audit personnel;
- Publishing fiscal information, transparency of preparation and execution of state budget;
- Introduction of a mandatory tender system for public procurements.

Institutional reform:

- Reduction of the number of state institutions, reduction of staff;
- Substitution of the procedure of personal visits for solving problems by using mail, including e-mail system;
- De-politization of Government, introduction of an obligatory system of professional promotion on the base of performance and contest;
- Introduction of a clear and definite system of ethic standards for the state employees;
- Creation of independent institutions authorized for investigations the accusations in corruption.

Reduction of public tolerance:

- Coordination of efforts of educational, religious organizations and mass-media in an anti-corruption campaign;
- Assuring transparency of financing political parties;
- Training journalists in promoting a manner of balanced reporting, introduction of an ethic code for journalists;
- In order to improve the credibility of population in state structures – creation of a unique body for complaining about inadequate behavior of policemen, workers of custom service, fiscal auditors, etc.

As ***immediate measures for fighting corruption*** the following suggestions should be considered:

- Elaboration of a strategy for fighting corruption in terms of ministries and main directions: public procurements, public campaigns' management, urban planning, fiscal administration, customs reform, legislation;
- Formation at the national level of a coordinating body responsible for the implementation of the strategy for combating corruption;
- Identification of a number of key-agencies in the domains where a concentration of efforts is required to combat corruption during the first year;
- Applying of income declaration procedure for state employees, starting from the top level;
- In countries with a high level of corruption, where any attempt to fight corruption is treated as discrediting political opponents, a strategy of "detecting" corrupted officials at the top level in the ratio represented by parties in the Parliament (existing algorithm 2+2+1) could be applied. In order to gain the credibility of population, the cases should be proceeded publicly, by announcing the punishment of the law breakers, and the directions where obtained money are spent (pensions, wages, repayment of debts, etc.).
- An immediate installation of gas counters at the entrance and exit from the territory of Republic of Moldova.

As a set of ***measures to combat corruption at the customs service*** the following steps could be considered:

a) A temporary introduction of army in customs service;
b) Examining the possibility to transfer the customs service in private sector;
c) Elimination of politic influence in the customs service;
d) A decent remuneration of customs officers;
e) Construction of customs service buildings, service modernization;
f) Minimizing the discretion in decision making;
g) Applying a contest system in hiring employees, training custom officers (expertise techniques, responsibilities, classification of tariffs, using computers);
h) Enhancing fluidity of personnel within the departments for custom service control;
i) Setting up a modern informational system;
j) Carrying out of cross-checking information;
k) Using X-rays in custom service;
l) Making additional random controls (5% of total) of documentation and goods by special groups after passing the customs.

Conclusion. The corruption phenomenon in Moldova expanded so much, that it practically blocks the economic development of the country. Any attempt to modify the legislation targeted to the stimulation of private sector's development, encouragement of investments and innovational activities, export promotion, solving the problem of budget deficit, external debt, problems of the social and educational sectors will be unsuccessful until drastic measures to combat corruption - the moving force of the shadow economy - are not be undertaken. In order to achieve this, it is necessary to elaborate a clear strategy of fighting the above-mentioned phenomenon, by way of appealing to the experience of international organizations.

4.4. Change in Euromoney country risk rating of Moldova: September ’98 - March ‘99

The recent issue (March ’99) of the “Euromoney” magazine released the report on countries’ creditworthiness, periodical rating for political and economic risks, traditionally orienting this information towards the potential partners (investors, technical assistance donors, and others). The current rating is important for the Republic of Moldova because it covers the period after the “Black August”, just following the Russian crisis and its negative consequences for the economic and banking system of Moldova.

The table below presents Moldova’s rating along with the rating of its principal economic partners and neighbors in South-Eastern Europe.

Rank Mar 99	Rank Sept 98	Change		Total score	Political Risk	Economic performance	Debt Indicators	Credit rating	Access to bank finances	Access to short term finance	Access to capital markets
			Weighting	100	25	25	10	10	5	5	5
67	61	-6	Turkey	48.25	11.29	7.90	9.27	1.67	1.69	3.13	2.25
87	93	6	Bulgaria	37.87	6.85	6.30	9.17	1.46	0.09	1.83	1.50
89	82	-7	Romania	36.28	7.76	4.85	9.52	0.83	0.47	1.83	0.75
117	**142**	**25**	**Moldova**	**30.79**	**3.64**	**3.71**	**9.52**	**1.25**	**0.00**	**1.83**	**0.83**
126	118	-8	Ukraine	29.85	3.17	4.05	9.76	0.63	0.16	1.83	0.25
137	144	7	Belarus	27.69	2.35	3.83	9.95	0.00	0.00	0.89	0.67
161	127	-34	Russia	20.86	3.02	3.67	9.46	0.31	0.14	1.96	0.20

“Euromoney”, thus, gave a quite positive assessment to the work of the new Parliament of the Republic of Moldova, which starting October 1998 adopted a series of new Laws oriented towards the acceleration of reforms (amendments to the Land Code, laws on territorial-administrative reform, pension reform, energy sector privatization, and others.) The formation of the new Government by Ion Sturza, who has the image of the new generation of leaders, had also a positive impact. The defrosting of relations between the government of Moldova and IMF/WB is also worth mentioning.

One should notice that, that rating of Russian Federation – the epicenter of the crisis, in the period September 1998 – March 1999 plummeted by 34 points (from 127th to 161st place), of Ukraine dropped eight points (to 126), of Romania 7 points (to 89), while the rating of Moldova improved by some 25 points (from 142nd to 117th place).

The economic performance of each country is estimated on the basis of economic growth, monetary stability, current account and budget balance, unemployment and structural imbalances. The GDP growth prospects for 1999 and 2000 are also being considered.

The Republic of Moldova scored a total of 30.79 out of the highest possible result of 100. This is the 16^{th} result among the economies in transition, Central, East European and CIS countries. Analyzing the aggregate index by its components we could mention that Moldova scored only 3.64 for political stability and 3.71 for economic performance out of 25. Such a low score in political stability is related to the risk of non-payment or non-servicing of the loans for goods and services purchased, non-repatriation of capital.

Economic performance is the equally weighted sum of factors based on GNP per capita and on economic projections for the next year. Moldova outrun only Tajikistan, Armenia and Russia at this index.

Debt indicators are based on the ratios of the debt stock to GNP, debt service to exports, and current account balance to GNP. Also it includes the ration of rescheduled debt to debt stock. The debt data employed in the analysis are from the World Bank's "Global Development Finance 1999", but contain data only for 1997. This may be the reason of such high scores of the Republic of Moldova. The credit rating indicator is based on the sovereign rating of Moody's, Standard & Poor's and Fitch IBCA. As a result of downgrading of Moldova's debt by Moody's in December 1998 and by S&P earlier, the credit rating dropped from 3.13 in 1997 to only 1.25, but Moldova still ranks 12^{th} among transition economies.

Access to bank, short-term financing, which indicate the disbursements of private non-guaranteed loans as percentage of GNP, as well as the access to capital markets place Moldova approximately in correspondence with it's overall rating.

Thus, in spite of the fact that according to official statistical data real improvements in Moldova's economy and everyday life of population did not occur, the new Parliament and Government, formed by Ion Sturza, on the first stage of their activity contributed to the improvement of Moldova's image, that may result in amelioration of investment climate, technological exchange and commercial cooperation.

March '99 Euromoney country risk ratings are presented in the tables below.

Rank March 99	*Rank Sept 98*	*Change Sept-Mar*		*Total score*	*Political risk*	*Econo-mic perfor-mance*	*Debt indicators*	*Debt in default or resche-duled*	*Credit ratings*	*Access to bank finance*	*Access to short-term finance*	*Access to capital markets*	*Discount on forfaiting*
			Weighting:	*100*	*25*	*25*	*10*	*10*	*10*	*5*	*5*	*5*	*5*
1	1	0	Luxembourg	98.48	24.28	25.00	10.00	10.00	10.00	5.00	5.00	5.00	4.20
2	6	4	Switzerland	98.36	24.88	23.85	10.00	10.00	10.00	5.00	5.00	5.00	4.63
3	8	5	Norway	95.43	23.96	21.90	10.00	10.00	10.00	5.00	5.00	5.00	4.57
4	2	-2	United States	94.92	25.00	20.28	10.00	10.00	10.00	5.00	5.00	5.00	4.64
5	4	-1	Netherlands	94.22	24.51	19.71	10.00	10.00	10.00	5.00	5.00	5.00	5.00
6	3	-3	Germany	94.04	24.87	19.55	10.00	10.00	10.00	5.00	5.00	5.00	4.62
7	7	0	France	93.68	24.78	19.27	10.00	10.00	10.00	5.00	5.00	5.00	4.62
8	5	-3	Austria	93.30	23.96	19.35	10.00	10.00	10.00	5.00	5.00	5.00	4.99
9	11	2	Denmark	93.24	23.32	20.96	10.00	10.00	9.38	5.00	5.00	5.00	4.59
10	13	3	Belgium	91.18	23.27	18.76	10.00	10.00	9.17	5.00	5.00	5.00	4.99
11	23	12	Japan	90.94	23.81	18.88	10.00	10.00	9.58	5.00	5.00	4.80	3.87
12	12	0	Finland	90.91	22.52	19.22	10.00	10.00	9.58	5.00	5.00	5.00	4.59
13	9	-4	United Kingdom	90.87	24.72	16.52	10.00	10.00	10.00	5.00	5.00	5.00	4.63
14	14	0	Sweden	90.33	22.54	19.24	10.00	10.00	8.96	5.00	5.00	5.00	4.59
15	10	-5	Ireland	90.12	22.66	17.69	10.00	10.00	9.79	5.00	5.00	5.00	4.97
16	15	-1	Canada	90.09	23.48	17.72	10.00	10.00	8.96	5.00	5.00	5.00	4.93
17	21	4	Singapore	88.88	23.41	18.62	10.00	10.00	9.58	5.00	5.00	3.80	3.46
18	19	1	Australia	87.79	21.89	18.02	10.00	10.00	8.75	5.00	5.00	5.00	4.13
19	18	-1	Italy	87.62	22.52	16.57	10.00	10.00	8.96	5.00	5.00	5.00	4.57
20	17	-3	New Zealand	86.90	21.70	16.20	10.00	10.00	9.06	5.00	5.00	5.00	4.93
21	16	-5	Spain	86.72	22.33	15.63	10.00	10.00	9.17	5.00	5.00	5.00	4.60
22	22	0	Iceland	84.47	20.22	17.30	10.00	10.00	7.81	5.00	5.00	5.00	4.13
23	20	-3	Portugal	84.41	21.91	14.18	10.00	10.00	9.17	5.00	5.00	5.00	4.16
24	114	90	Bermuda	81.49	20.91	19.62	10.00	10.00	8.96	5.00	5.00	2.00	0.00
25	24	-1	Taiwan	79.74	20.38	14.27	10.00	10.00	8.75	5.00	5.00	3.13	3.22
26	32	6	Hong Kong	76.73	18.68	15.75	10.00	10.00	6.88	5.00	4.29	3.30	2.84
27	27	0	Greece	75.87	18.04	13.84	10.00	10.00	5.31	5.00	5.00	5.00	3.67
28	25	-3	Cyprus	75.39	18.00	12.72	10.00	10.00	7.19	5.00	4.29	5.00	3.19
29	28	-1	United Arab Emirates	73.39	17.10	15.26	10.00	10.00	6.88	5.00	4.11	1.70	3.35
30	26	-4	Malta	71.81	19.48	11.74	10.00	10.00	6.88	1.01	4.29	5.00	3.60
31	31	0	Israel	70.62	15.97	12.82	10.00	10.00	6.25	5.00	4.20	3.25	3.13

Rank March 99	Rank Sept 98	Change Sept-Mar		Total score	Political risk	Econo-mic perfor-mance	Debt indicators	Debt in default or resche-duled	Credit ratings	Access to bank finance	Access to short-term finance	Access to capital markets	Discount on forfaiting
			Weighting:	100	25	25	10	10	10	5	5	5	5
32	33	1	Slovenia	70.06	16.62	12.07	9.94	10.00	6.46	3.84	3.84	3.90	3.39
39	39	0	Hungary	65.75	17.39	10.74	9.51	10.00	5.00	2.80	2.95	4.00	3.35
42	38	-4	Poland	62.06	15.99	10.54	9.56	10.00	4.79	0.37	3.13	4.20	3.49
43	40	-3	Czech Republic	61.96	16.58	9.97	9.65	10.00	5.83	0.50	3.13	3.80	2.50
50	51	1	Estonia	54.38	12.52	9.09	9.92	10.00	5.42	0.62	2.46	2.63	1.73
52	66	14	Croatia	54.04	11.01	9.42	9.64	10.00	4.38	2.55	2.28	2.60	2.17
62	57	-5	Latvia	50.67	11.23	8.54	9.93	10.00	5.00	0.20	2.37	1.67	1.73
63	62	-1	Lithuania	50.14	11.81	8.25	9.87	10.00	3.96	0.00	2.28	2.25	1.73
66	58	-8	Slovak Republic	48.33	10.91	8.51	9.54	10.00	3.75	0.53	2.28	2.10	0.71
67	61	-6	Turkey	48.25	11.29	7.90	9.27	10.00	1.67	1.69	3.13	2.25	1.07
78	81	3	Kazakhstan	40.68	8.54	6.25	9.75	10.00	2.50	0.81	1.83	1.00	0.00
87	93	6	Bulgaria	37.87	6.85	6.30	9.17	10.00	1.46	0.09	1.83	1.50	0.67
89	82	-7	Romania	36.28	7.76	4.85	9.52	10.00	0.83	0.47	1.83	0.75	0.27
106	116	10	Azerbaijan	33.39	4.88	6.48	9.82	10.00	0.00	0.00	1.55	0.67	0.00
110	128	18	Kyrgyz Republic	32.86	5.41	7.12	9.36	9.91	0.00	0.00	0.89	0.17	0.00
111	125	14	Turkmenistan	32.63	5.18	5.61	8.91	10.00	0.94	0.00	1.83	0.17	0.00
117	**142**	**25**	**Moldova**	**30.79**	**3.64**	**3.71**	**9.52**	**10.00**	**1.25**	**0.00**	**1.83**	**0.83**	**0.00**
126	118	-8	Ukraine	29.85	3.17	4.05	9.76	10.00	0.63	0.16	1.83	0.25	0.00
127	105	-22	Uzbekistan	29.78	6.23	6.83	9.71	4.80	0.00	0.05	1.83	0.33	0.00
137	144	7	Belarus	27.69	2.35	3.83	9.95	10.00	0.00	0.00	0.89	0.67	0.00
139	170	31	Tajikistan	27.43	4.04	3.52	9.46	9.40	0.00	0.00	0.89	0.13	0.00
141	134	-7	Georgia	26.81	3.12	5.89	9.12	6.69	0.00	0.00	1.61	0.38	0.00
146	143	-3	FYR Macedonia	25.33	4.56	8.19	9.40	0.00	0.00	0.16	2.19	0.50	0.33
159	137	-22	Armenia	21.22	2.98	–	9.36	6.82	0.00	0.00	0.89	1.17	0.00
161	127	-34	Russia	20.86	3.02	3.67	9.46	2.09	0.31	0.14	1.96	0.20	0.00
167	135	-32	Albania	17.49	2.94	4.10	9.42	0.00	0.00	0.00	0.89	0.13	0.00
171	168	-3	Yugoslavia	15.25	0.92	3.83	0.00	10.00	0.00	0.00	0.00	0.50	0.00

Global economic projections

Rank			Average performan	Economic performance		Expected change	GNP growth	
Mar 99	Sept 98		1999-2000	1999	2000	1999-2000	1999	2000
1	5	Ireland	82.68	82.64	82.73	0.09	6.4	6.5
2	6	Netherlands	82.25	81.64	82.86	1.21	2.6	2.8
3	7	Finland	82.21	82.08	82.33	0.25	3.3	3.1
4	16	Canada	81.31	81.85	80.77	-1.08	2.4	2.4
5	1	Luxembourg	81.29	81.71	80.86	-0.86	3.4	3.2
6	20	Australia	81.05	80.55	81.55	1.00	2.6	3.0
7	3	United States	80.90	81.71	80.10	-1.62	2.5	2.1
8	11	France	79.44	78.12	80.76	2.65	2.3	2.6
9	12	Sweden	79.00	78.82	79.18	0.36	2.3	2.4
10	10	Denmark	78.81	77.69	79.92	2.23	1.7	2.1
11	2	Norway	78.49	78.18	78.80	0.62	1.5	1.8
12	–	Brunei	78.00	78.00	78.00	0.00	–	–
13	8	Germany	77.56	75.50	79.63	4.13	2.0	2.4
14	22	New Zealand	77.17	76.33	78.00	1.67	2.0	3.0
15	15	Spain	77.03	76.53	77.53	1.00	3.3	3.3
16	4	Austria	76.88	74.38	79.38	5.00	2.4	2.6
17	13	Switzerland	76.42	75.85	77.00	1.15	1.5	1.8
18	18	Belgium	76.00	74.86	77.14	2.29	2.2	2.5
19	14	Portugal	75.24	75.33	75.15	-0.18	3.4	3.1
20	19	Italy	73.53	72.13	74.94	2.81	2.0	2.4
21	21	United Kingdom	72.34	70.63	74.06	3.44	1.3	1.9
22	23	Taiwan	71.42	68.08	74.75	6.67	4.0	4.7
23	28	Greece	70.90	69.90	71.90	2.00	3.2	3.1
24	30	United Arab Emirates	70.50	72.00	69.00	-3.00	0.4	2.3
25	–	Bermuda	67.50	75.00	60.00	-15.00	–	–
26	38	Bahrain	66.25	65.00	67.50	2.50	0.4	1.6
27	17	Iceland	66.00	66.00	66.00	0.00	4.1	3.2
28	40	Panama	65.67	67.33	64.00	-3.33	3.7	3.5
29	26	Poland	65.51	64.58	66.44	1.86	4.4	4.6
30	29	Hungary	65.37	63.36	67.38	4.01	4.0	4.2
31	24	Singapore	65.03	62.50	67.56	5.06	0.7	3.0
32	78	Bahamas	65.00	70.00	60.00	-10.00	4.0	3.0
33	34	Slovenia	64.60	64.00	65.20	1.20	3.4	3.5
34	9	Malta	63.88	63.25	64.50	1.25	3.8	5.0
35	41	China	63.71	64.50	62.93	-1.57	6.6	6.3
36	60	South Korea	62.99	58.14	67.85	9.70	0.5	3.3
37	121	Syria	62.25	55.50	69.00	13.50	1.2	2.6
38	27	Cyprus	62.03	61.80	62.25	0.45	3.5	4.0
39	73	Fiji	61.00	60.00	62.00	2.00	-1.5	2.0
40	42	Hong Kong	60.87	57.27	64.47	7.20	-1.0	1.8
41	–	Antigua & Barbuda	60.00	70.00	50.00	-20.00	–	–
42	133	Barbados	60.00	70.00	50.00	-20.00	4.0	4.0
43	36	Czech Republic	59.82	58.64	61.00	2.36	0.3	1.9
44	47	Jordan	59.25	56.00	62.50	6.50	2.2	2.8
45	43	Israel	59.12	58.83	59.40	0.57	1.7	2.9
46	35	Chile	58.96	56.42	61.50	5.08	1.9	3.9
47	53	Qatar	58.83	57.67	60.00	2.33	3.1	5.4
48	45	Japan	58.81	59.69	57.93	-1.75	-0.6	0.6
49	49	Mexico	58.25	57.42	59.09	1.67	2.6	3.5
50	32	Philippines	58.18	55.91	60.45	4.55	1.8	3.5